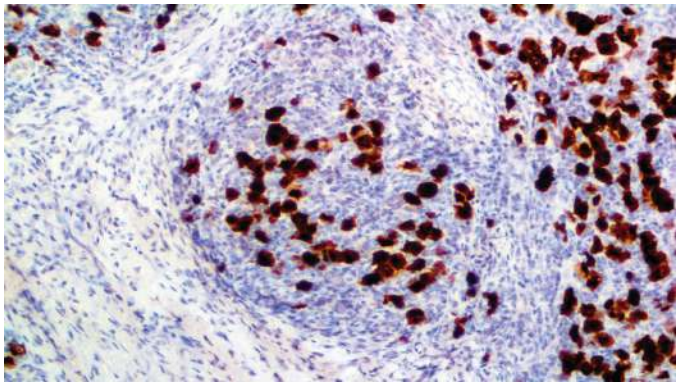
ALK-1/CD246

Clone: EP302
Rabbit Monoclonal

CE IVD



Inset: IHC of ALK-1/CD246 on a FFPE Anaplastic Large Cell Lymphoma Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified medical professional.

* The ALK-1/CD246, clone EP302, has been manufactured using Epitomics RabMab® technology covered under Patent No.'s 5,675,063 and 7,402,409.

Immunogen
A synthetic peptide corresponding to residues of human NPM-ALK fusion protein.

Summary and Explanation
Anaplastic Lymphoma Kinase (ALK) was originally discovered as a NPM (Nucleophosmin)-ALK fusion protein. The ALK gene is on chromosome 2. Upon translocation between chromosome 2 and chromosome 5 t(2;5), the ALK gene fuses with the NPM gene. The chimeric product (NPM ALK) resulting from t(2;5) translocation is a protein of 80 kDa with the N terminal portion of NPM linked to the complete intracellular portion of ALK.

This antibody recognizes a human p80 protein, identified as a hybrid of the Anaplastic Lymphoma Kinase (ALK) gene and the Nucleophosmin (NPM) gene resulting from the t(2;5)(p23;q35) translocation found in a third of Large-Cell Lymphomas. ALK-1 is detected in 60% of Anaplastic Large-Cell Lymphomas and has proven to indicate a better prognosis in the ALK-1 (+) group.

Antibody Type	Rabbit Monoclonal	**Clone**	EP302
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic, Nuclear	**Species Reactivity**	Human, Predicted: Mouse, Rat
Control	Anaplastic Large Cell Lymphoma		
Application	Lymphomas, Lung Cancer		

Presentation
Anti-ALK-1/CD246 is a Rabbit Monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 2796	Predilute	Ready-to-Use	3.0 mL
BSB 2797	Predilute	Ready-to-Use	7.0 mL
BSB 2798	Predilute	Ready-to-Use	15.0 mL
BSB 2799	Concentrate	1:50-1:200	0.1 mL
BSB 2800	Concentrate	1:50-1:200	0.5 mL
BSB 2801	Concentrate	1:50-1:200	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9010-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label.
Do not use after expiration date listed on the package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain / Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Cataldo KA, et al. Am J Surg Pathol. 1999:32(1):1386-1392.
2. Nakamura S, Shiota M, et al. Am J Surg Pathol. 1997:21(12):1420-1432.
3. Falini B, Bigerna B, et al. Am J Pathol. 1998: 153(3)Sept. 875-886.
4. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012. https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key / Légende des symboles/Erläuterung der Symbole

EC REP QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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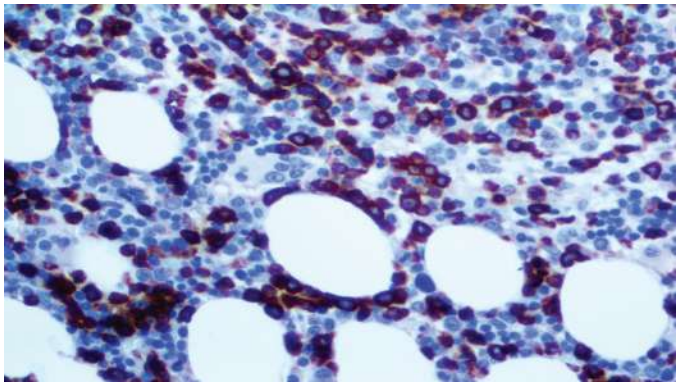
Myeloperoxidase

Clone: Polyclonal
Rabbit Polyclonal

CE IVD



Inset: IHC of Myeloperoxidase on a FFPE Bone Marrow Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
Purified human granulocytic MPO.

Summary and Explanation
Myeloperoxidase (MPO) is a peroxidase enzyme most abundantly present in neutrophil granulocytes. It is a lysosomal protein stored in azurophilic granules of the neutrophil. MPO has a heme pigment, which causes its green color in secretions rich in neutrophils, such as pus and some forms of mucus. Historically, immunohistochemical staining for myeloperoxidase was used in the diagnosis of Acute Myeloid Leukemia to demonstrate that the leukemic cells were derived from the myeloid lineage. Myeloperoxidase staining is still important in the diagnosis of Extramedullary Leukemia or Chloroma.

Myeloperoxidase detects granulocytes and monocytes in blood and precursors of granulocytes in the bone marrow. This antibody can detect myeloid cell populations of the bone marrow as well as in other sites.

Antibody Type	Rabbit Polyclonal	**Clone**	Polyclonal
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic	**Species Reactivity**	Human, Dog, Cat
Control	Bone Marrow		
Application	Leukemia & Histiocytic		

Presentation
Anti-Myeloperoxidase is a purified immunoglobulin fraction of rabbit antiserum that is filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 5785	Predilute	Ready-to-Use	3.0 mL
BSB 5786	Predilute	Ready-to-Use	7.0 mL
BSB 5787	Predilute	Ready-to-Use	15.0 mL
BSB 5788	Concentrate	1:100-1:500	0.1 mL
BSB 5789	Concentrate	1:100-1:500	0.5 mL
BSB 5790	Concentrate	1:100-1:500	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9296-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Heinecke JW, Li W, Francis GA, Goldstein JA, Tyrosyl J, Clin Invest. 1993;91:2866-72
2. Brennan ML, Penn MS, et al. N Engl J Med. 2003;349:1595-604
3. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012.
https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

EC REP QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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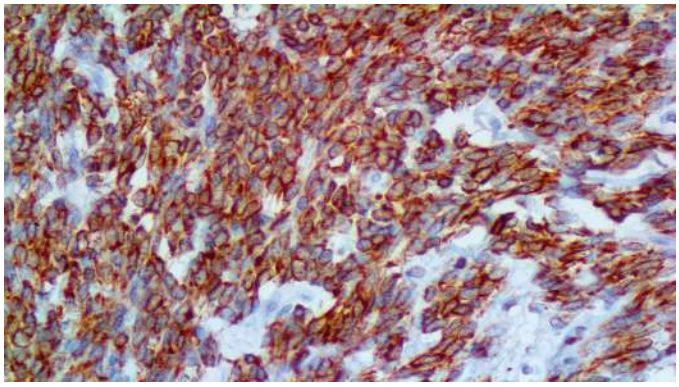
bcl-2

Clone: BSB-5
Mouse Monoclonal

CE IVD



Inset: IHC of bcl-2 on a FFPE Follicular Lymphoma Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
A synthetic peptide corresponding to residues in the N-terminus of human bcl2.

Summary and Explanation
bcl-2 is an integral outer mitochondrial membrane protein that blocks the apoptotic death of some cells such as lymphocytes. Constitutive expression of bcl-2, such as in the case of translocation of bcl-2 to Ig heavy chain loci, is thought to be the cause of Follicular Lymphoma.

Anti-bcl-2 has shown consistent negative reaction on reactive germinal centers and positive staining of neoplastic follicles in Follicular Lymphoma. Consequently, this antibody is valuable when distinguishing between reactive and neoplastic follicular proliferation in lymph node biopsies. This antibody may also be used in distinguishing between those Follicular Lymphomas that express bcl-2 protein and the small number in which the neoplastic cells are bcl-2-negative. Anti-bcl-2 has been used as a predictive biomarker for recurrence of Cancer of the Breast and Non-Small-Cell Carcinoma of the Lung.

Antibody Type	Mouse Monoclonal	**Clone**	BSB-5
Isotype	IgG1/K	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic, Membranous	**Species Reactivity**	Human
Control	Tonsil, Lymph Node		
Application	Lymphoma, Endometrial & Genital Cancer, Prostate Cancer, Breast Cancer, Lung Cancer		

Presentation
Anti-bcl-2 is a Mouse Monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 5071	Predilute	Ready-to-Use	3.0 mL
BSB 5072	Predilute	Ready-to-Use	7.0 mL
BSB 5073	Predilute	Ready-to-Use	15.0 mL
BSB 5074	Concentrate	1:50-1:200	0.1 mL
BSB 5075	Concentrate	1:50-1:200	0.5 mL
BSB 5076	Concentrate	1:50-1:200	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9029-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label.
Do not use after expiration date listed on the package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain / Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. 1. Sujimoto Y, et al. Prac Natl Acad Dcie (USA). 1986;83:5214-5218
2. Clearly ML, et al. Cell. 1986;47:19-28
3. Pezzella F, et al. Am J Pathol. 1990;137:225-232
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6. Ciocca DR, Elledge R, Endocrine. 2000;Aug;13(1):1-10
7. Martin B, et al. Br J Cancer. 2003 Jul7;89(1):55-64
8. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.
https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key / Légende des symboles/Erläuterung der Symbole

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IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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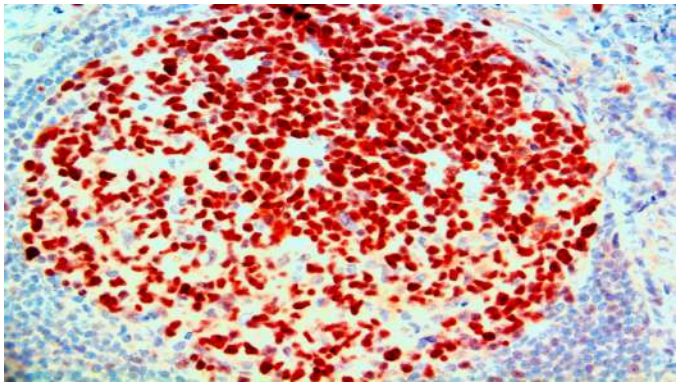
bcl-6

Clone: BSB-26
Mouse Monoclonal

CE IVD



Inset: IHC of bcl-6 on a FFPE Tonsil Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
Synthetic peptide corresponding to residues of the C-terminus of the human bcl-6 protein.

Summary and Explanation
bcl-6 is a transcriptional regulator gene which codes for a 706-amino-acid nuclear zinc finger protein. Antibodies to this protein stain the germinal center cells in lymphoid follicles, follicular cells and interfollicular cells in Follicular Lymphoma, Diffuse Large B-Cell Lymphomas, Burkitt's Lymphoma, and the majority of the Reed-Sternberg cells in Nodular Lymphocyte-Predominant Hodgkin's Disease.

bcl-6 is also useful in identifying neoplastic cells in cases of nodular Lymphocyte-Predominant Hodgkin's Disease. In contrast, anti-bcl-6 rarely stains Mantle-Cell Lymphoma and MALT Lymphoma. bcl-6 expression is seen in approximately 45% of CD30+ Anaplastic Large-Cell Lymphomas but is consistently absent in other peripheral T-cell Lymphomas.

Antibody Type	Mouse Monoclonal	**Clone**	BSB-26
Isotype	IgG1	**Reactivity**	Paraffin, Frozen
Localization	Nuclear	**Species Reactivity**	Human
Control	Tonsil, Lymph Node, Thymus, Skin, Breast, Brain, Follicular Lymphoma		
Application	Hodgkin's and Non-Hodgkin Lymphoma, Lymphoma, Gall Bladder and Pancreatic Cancer		

Presentation
Anti-bcl-6 is a Mouse Monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 3434	Predilute	Ready-to-Use	3.0 mL
BSB 3435	Predilute	Ready-to-Use	7.0 mL
BSB 3436	Predilute	Ready-to-Use	15.0 mL
BSB 3437	Concentrate	1:50-1:200	0.1 mL
BSB 3438	Concentrate	1:50-1:200	0.5 mL
BSB 3439	Concentrate	1:50-1:200	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9030-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on the package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain / Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Dogan A, Badgi E, et al. Am J Surg Pathol. 2000;24(6):846-852
2. Shaff er AL, et al. Immunity. 2000;Vol.13.199-212,Aug.
3. M.D. Kraus J, Haley, AM J Surg Pathol. 2000;24(8):1068-78
4. Carbone A, et al. Blood. Vol.90,No.6(Sept.15)1997;pp2445-2450
5. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.
https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key / Légende des symboles/Erläuterung der Symbole

EC REP QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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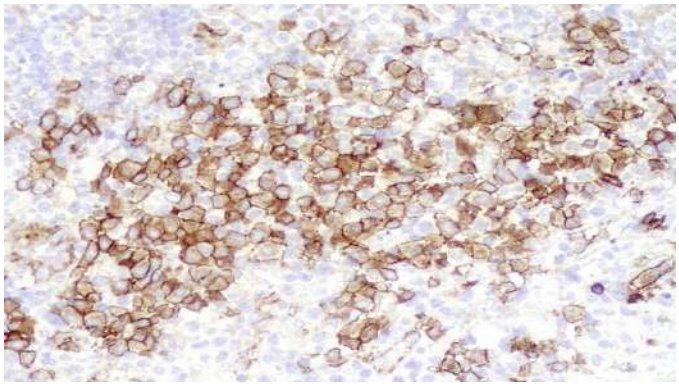
E-mail: sales@biosb.com | Website: www.biosb.com

CD123 IL-3Ra

Clone: BSB-59
Mouse Monoclonal

CE IVD



Inset: IHC of CD123 IL-3Ra on a FFPE Kikuchi-Fujimoto Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
Recombinant human CD123 protein.

Summary and Explanation
CD123 is α chain of the IL-3 receptor. This 60-70 kDa transmembrane protein, by itself, binds to IL-3 with rather low affinity. However, when associated with CD131 (common β chain), the protein binds to IL-3 with high affinity. The gene coding for the receptor is located in the pseudoautosomal region of the X and Y chromosomes. The receptor belongs to the Type I cytokine-receptor family and is a heterodimer with a unique alpha chain paired with the common beta (beta c or CDw131) subunit.

The CD123 receptor, found on pluripotent progenitor cells, induces tyrosine phosphorylation within the cell and promotes proliferation and differentiation within the hematopoietic cell lines. CD123 is expressed by myeloid precursors, macrophages, dendritic cells, mast cells, basophils, and megakaryocytes.

Antibody Type	Mouse Monoclonal	**Clone**	BSB-59
Isotype	IgG1/K	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic, Membranous	**Species Reactivity**	Human
Control	Tonsil, Lymph Node, Kikuchi-Fujimoto Disease		
Application	Lymphomas, Leukemia & Histiocytic		

Presentation
Anti-CD123 IL-3Ra is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 5323	Predilute	Ready-to-Use	3.0 mL
BSB 5324	Predilute	Ready-to-Use	7.0 mL
BSB 5325	Predilute	Ready-to-Use	15.0 mL
BSB 5326	Concentrate	1:25-1:100	0.1 mL
BSB 5327	Concentrate	1:25-1:100	0.5 mL
BSB 5328	Concentrate	1:25-1:100	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9064-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label.
Do not use after expiration date listed on the package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Herling M, Teitell M, Shen R, Medeiros L, Jones D, Blood. 2003; 101:50075009
2. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012.
https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

EC REP QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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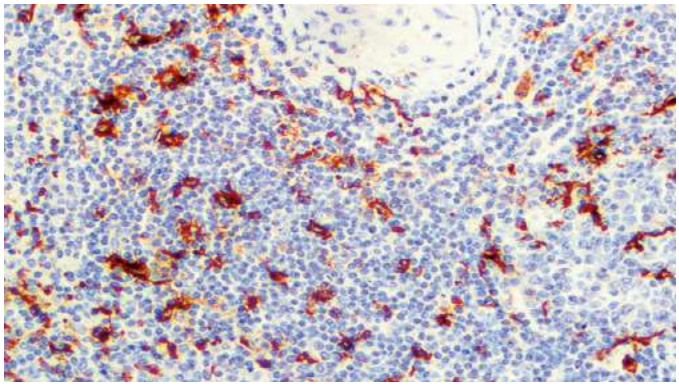
CD13

Clone: 38C12
Mouse Monoclonal

CE IVD



Inset: IHC of CD13 on a FFPE Tonsil Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
Recombinant protein encoding the C-terminal half of the extracellular domain of human CD13.

Summary and Explanation
CD13 (also known as aminopeptidase-N) is expressed on the majority of peripheral blood monocytes and granulocytes. It is also expressed by the majority of acute myeloid leukemias, chronic myeloid leukemias in myeloid blast crisis, a smaller percentage of lymphoid leukemias and myeloid cell lines. CD13 is absent from normal lymphocytes, platelets and erythrocytes. CD13 is also present on fibroblasts, endothelial cells, epithelial cells from renal proximal tubules and intestinal brush border, bone marrow stromal cells, osteoclasts, and cells forming bile canaliculi.

Anti-Human CD13 recognizes the human CD13 antigen expressed on the majority of peripheral blood monocytes and granulocytes and on endothelial cells. CD13 plays a role in biologically active peptide metabolism, in the control of growth and differentiation, in phagocytosis and in bactericidal/tumoricidal activities. CD13 also serves as a receptor for human coronaviruses (HCV).

Antibody Type	Mouse Monoclonal	**Clone**	38C12
Isotype	IgG1	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic, Membranous	**Species Reactivity**	Human
Control	Spleen, Tonsil, Prostate, Liver		
Application	Leukemia & Histiocytic, Sarcoma & Soft Tissue, Liver Cancer		

Presentation
Anti-CD13 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 6324	Predilute	Ready-to-Use	3.0 mL
BSB 6325	Predilute	Ready-to-Use	7.0 mL
BSB 6326	Predilute	Ready-to-Use	15.0 mL
BSB 6327	Concentrate	1:25-1:50	0.1 mL
BSB 6328	Concentrate	1:25-1:50	0.5 mL
BSB 6329	Concentrate	1:25-1:50	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9065-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on the package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Bonde J; et al. Brit J Haemat 1996; 92:269-79
2. Dixon J et al. J Clin Path 1994:47:43-7.
3. Nakase K; et al. Am J Clin Path, 1996; 105(6):761-8
4. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012. https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

EC REP QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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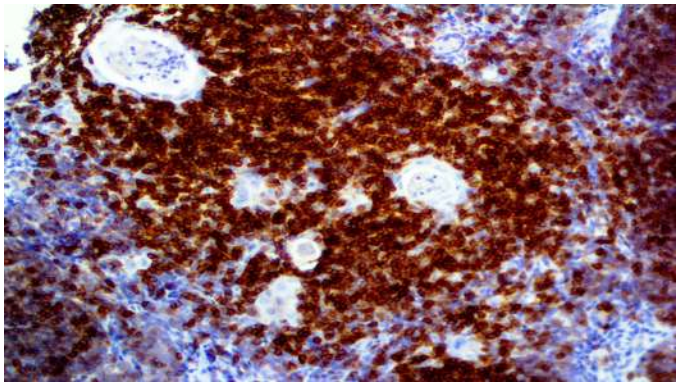
CD5

Clone: RBT-CD5
Rabbit Monoclonal

CE IVD



Inset: IHC of CD5 on a FFPE Thymus Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
Synthetic peptide corresponding to residues from the intercellular region of the human CD5 protein.

Summary and Explanation
CD5 is a glycoprotein monomer with an MW of 67 kDa belonging to the scavenger receptor cysteine-rich (SRCR) family of extracellular domain-like structures. It possesses a large cytoplasmic domain suitable for signal transduction.

CD5 is a T-cell marker that also reacts with a range of neoplastic B-cells, e.g., B-cell Chronic Lymphocytic Leukemia (B-CLL), B-cell Small Lymphocytic Lymphoma (B-SLL), and Mantle Cell Lymphoma. CD5 is expressed in T-lymphocyte subsets and is modulated during cellular activation; however, it does not react with granulocytes or monocytes.

Antibody Type	Rabbit Monoclonal	**Clone**	RBT-CD5
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Membranous	**Species Reactivity**	Human
Control	Tonsil, Lymph Node		
Application	Leukemia & Histiocytic, Lymphoma		

Presentation
Anti-CD5 is a rabbit monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 5155	Predilute	Ready-to-Use	3.0 mL
BSB 5156	Predilute	Ready-to-Use	7.0 mL
BSB 5157	Predilute	Ready-to-Use	15.0 mL
BSB 5158	Concentrate	1:25-1:100	0.1 mL
BSB 5159	Concentrate	1:25-1:100	0.5 mL
BSB 5160	Concentrate	1:25-1:100	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9099-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to the Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Chan JKC, et al. Histopathology. 1994;25:517-536
2. Kasaian MT, et al. Proc of the Soc for Exp Bio and Med. 1991;197:226-241
3. Jones NH, et al. Nature. 1986;323:346-349
4. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012.
https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

EC REP QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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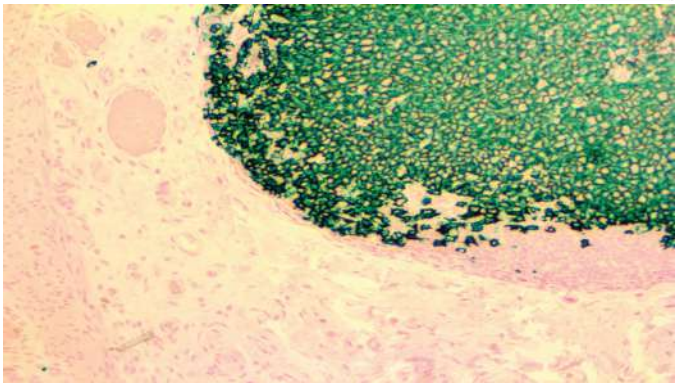
CD20 (L26)

Mouse Monoclonal Antibody

CE IVD



IHC of CD20 on FFPE Colon tissue

PRODUCT IDENTIFICATION REF

Catalog No.	Presentation	Volume
BSB 5190	Predilute Ready-to-Use	3.0 mL
BSB 5191	Predilute Ready-to-Use	7.0 mL
BSB 5192	Predilute Ready-to-Use	15.0 mL
BSB 5193	Concentrate	0.1 mL
BSB 5194	Concentrate	0.5 mL
BSB 5195	Concentrate	1.0 mL

INTENDED PURPOSE

CD20 (L26), Mouse Monoclonal Antibody is a primary antibody intended for laboratory use by trained laboratory personnel in an immunohistochemical (IHC) assay to qualitatively identify CD20 protein by light microscopy in normal and/or pathological formalin-fixed, paraffin-embedded (FFPE) human tissue.

The clinical interpretation of any staining or its absence should be performed by a qualified pathologist and complemented by morphological studies using proper controls and evaluated within the context of the patient's clinical history and other diagnostic tests.

SUMMARY AND EXPLANATION

CD20 is a transmembrane, non-glycosylated protein expressed on B-cell precursors and mature B-cells, but lost following differentiation into plasma cells. CD20 is not expressed in non-hematopoietic neoplasms, but is expressed in Reed-Sternberg cells predominant in Hodgkin's disease.

PRINCIPLE OF PROCEDURE

In general, immunohistochemical (IHC) staining techniques allow for antigen visualization via the sequential application of a specific antibody to the antigen (primary antibody), a secondary antibody to the primary antibody (link antibody), an enzyme complex, and a chromogenic substrate with interposed washing steps. The enzymatic activation of the chromogen results in a visible reaction product at the antigen site. The specimen may then be counterstained and coverslipped. Results are interpreted using a light microscope.

MATERIALS AND PRESENTATION

This monoclonal antibody is derived from cell culture supernatant and provided in a diluent at pH 7.3-7.7 containing Tris buffer, 1% BSA as a stabilizer, and <0.1% sodium azide as a preservative.

Antibody Type	Mouse Monoclonal	**Clone**	L26
Isotype	IgG2a/K	**Reactivity**	Human
Localization	Membranous	**Source**	Supernatant
Recommended Dilution Range	1:250-1:1000		
Immunogen	Human tonsil B cells.		

MATERIALS REQUIRED BUT NOT PROVIDED

Positive and negative control tissues
Positively charged microscope slides, such as Bio SB Hydrophilic Plus Slides *(BSB 7028)*
Drying oven capable of maintaining a temperature of 53-65 °C
Xylene or xylene substitute, such as Tinto Dewaxer *(BSB 7458)*
Ethanol or reagent alcohol
Distilled water
Slide handling equipment, such as staining dishes (*BSB 7009*) and slide holder *(BSB 7010)*
Heating equipment for tissue pretreatment, such as the Bio SB TintoRetriever Pressure Cooker *(BSB 7015)*
Suitable epitope retrieval solution, such as ImmunoDNA Retriever with Citrate (*BSB 0020 through BSB 0023*) or EDTA *(BSB 0030 through BSB 0033)*
IHC Wash Buffer, such as ImmunoDNA Washer *(BSB 0029, BSB 0042, BSB 0149, BSB 0150)*
Antibody diluent, such as ImmunoDetector Protein Blocker/ Antibody Diluent *(BSB 0113 through BSB 0115, BSB 0040, BSB 0041)*
Negative Control Reagent, such as *(BSB 0040A through C, BSB 0041A through C)*
Anti-Mouse detection system, such as the Bio SB PolyDetector Plus HRP Detection System (BSB 0257 through 0266)
Counterstain, such as Bio SB Hematoxylin Counterstainer *(BSB 0024 through BSB 0028)*
Mounting medium, such as PermaMounter *(BSB 0097)* or AquaMounter *(BSB 0090 through BSB 0093)*
Cover glass, such as Tinto Coverslips *(BSB-7100-100, BSB-7100-1000, BSB-7100-20000)*
Timer
Light microscope (40-400x)

WARNINGS AND PRECAUTIONS

1. For *in vitro* diagnostic (IVD) use.
2. For professional users only. Results should be interpreted by a qualified medical professional and complemented by morphological studies using proper controls and evaluated within the context of the patient's clinical history and other diagnostic tests.
3. This product contains <0.1% sodium azide (NaN_3) as a preservative. The following hazard and precautionary statements apply: H303 - May be harmful if swallowed. P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. For additional safety information refer to the Safety Data Sheet.
4. Avoid contact with eyes. If contact occurs, flush with large quantities of water.

Template #: T00083
Template Version #: 4

5. Specimens, before and after fixation, and all materials exposed to them, should be handled as if capable of transmitting infection and disposed of with proper precautions.
6. Materials of human and animal origin should be handled as biohazardous materials and disposed of with proper precautions. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories."
7. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
8. Avoid microbial contamination of reagents as it may cause incorrect results.
9. Accumulated sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing.
10. Dispose of contents and container in accordance with all local, regional, national, and international regulations.
11. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).

REAGENT STORAGE AND STABILITY

1. Store at 2-8 °C in original packaging.
2. This product is stable up to the expiration date on the product label when stored according to instructions. Do not use after expiration date listed on the label.
3. Temperature fluctuations should be avoided. Directly following every run, tightly close product and place in refrigerator in an upright position. Avoid prolonged exposure to room temperature conditions.
4. There are no definitive signs to indicate instability of this product. Contact Bio SB Customer Support if there is a suspected indication of reagent instability.

PROCEDURE

Recommended Specimen Preparation

The antibody can be used on FFPE tissue sections. Ensure tissue undergoes appropriate fixation for best results.
1. Cut and mount 3-5 µm FFPE tissues on positively charged slides.
2. Air dry slides for 1 hour at 60 °C.
3. Deparaffinize and rehydrate FFPE tissues:
   - Heat slides in a 60 °C incubator for 10 min. to partially melt the paraffin.
   - Pass slides through three xylene or xylene alternative baths, 2 min. per bath
   - Pass slides through two 100% ethanol baths, 2 min. per bath
   - Pass slides through one 70% ethanol bath for 2 min.
   - Pass slides through one 30% ethanol bath for 2 min.
   - Pass slides through one distilled water bath for 2 min.
4. Subject tissues to heat-induced epitope retrieval (HIER) using a suitable HIER solution, such as Bio SB ImmunoDNA Retriever with Citrate or ImmunoDNA Retriever with EDTA. Use a heating method such as TintoRetriever Pressure Cooker or equivalent; follow the Instructions for Use for the heating method used.
5. Following retrieval, immediately remove the staining dish with slides from TintoRetriever Pressure Cooker and transfer to room temperature; let cool until the retrieval solution is no longer opaque. Wash slides with Bio SB ImmunoDNA Washer or equivalent and begin IHC protocol. Note: Tissues should remain hydrated via use of a wash buffer.

Recommended Manual Immunohistochemical Protocol

Wash slides between each step in the table below with ImmunoDNA Washer or equivalent at least 3 times, until ImmunoDNA Washer runs evenly on the slide surface.

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
HRP/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	N/A	15 min.
Substrate-Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Recommended Automated Immunohistochemical Protocol

Perform according to the manufacturer's instructions of the applicable automated instrument.

Preparation of the Working Solution

Prediluted antibody is a ready-to-use product. The concentrated antibody should be diluted and optimized by the user.

Mounting Protocols

For instructions about using a mounting media such as PermaMounter, refer to the Instructions for Use of the product.

QUALITY CONTROL RECOMMENDATIONS

Controls should be fresh autopsy, biopsy, or surgical specimens fixed, processed, and embedded as soon as possible in the same manner as the sample(s). Such a control monitors all steps of the analysis, from tissue preparation through staining. The use of a tissue section fixed or processed differently from the test specimen will act as a control for all reagents and method steps except fixation and tissue processing.

Bio SB Control Slides Available

Catalog No.	Quantity
BSB-9078-CS	5 slides

Positive Tissue Control: A positive tissue control must be run with every test procedure. A tissue with weak positive staining (e.g., low expressor) is optimal for detection of subtle changes in the primary antibody sensitivity from instability or problems with the IHC methodology. Positive tissue control for the antibody may include the following: tonsil, lymph node.

Known positive tissue controls should only be utilized for monitoring the correct performance of processed tissues and test reagents, rather than as an aid in formulating a specific diagnosis. If the positive tissue controls fail to demonstrate positive staining, results with the test specimens should be considered invalid.

Negative Tissue Control: One tissue may contain both positive and negative staining cells or tissue components and serve as both the positive and negative control tissue. Internal negative control sites should be verified by the user. The components that do not stain should demonstrate the absence of specific staining and provide an indication of non-specific background staining.

Negative Control Reagent: A negative control reagent must be run for every specimen to aid in the interpretation of results. A negative control reagent is used in place of the primary antibody to evaluate nonspecific staining. The slide should be treated with negative control reagent, matching the host species of the primary antibody, and ideally having the same IgG concentration.
The incubation period for the negative control reagent should equal the primary antibody incubation period.

INTERPRETATION OF RESULTS

Positive Tissue Control Interpretation: The stained positive tissue control should be examined first to ascertain that all reagents are functioning properly. The presence of an appropriately colored reaction product within the target cells/cellular components is indicative of positive reactivity. Refer to the IFU of the detection system used for expected color reactions. If the positive tissue controls fail to demonstrate positive staining, any results with the test specimens should be considered invalid. Depending on the incubation length and potency of the hematoxylin used, counterstaining will result in a pale to dark blue coloration of the cell nuclei. Excessive or incomplete counterstaining may compromise proper interpretation of results.

Negative Tissue Control Interpretation: The negative tissue control should be examined after the positive tissue control to verify the specificity of the labeling of the target antigen by the primary antibody. The absence of specific staining in the negative tissue control confirms the lack of antibody cross-reactivity to cells/cellular components. If specific staining occurs in the negative tissue control, results with the patient specimen should be considered invalid. Nonspecific staining, if present, usually has a diffuse appearance. Sporadic staining of connective tissue may also be observed in sections from excessively formalin-fixed tissues. Use intact cells for interpretation of staining results. Necrotic or degenerated cells often stain nonspecifically.

Patient Tissue Interpretation: Examine stained patient specimens last. Positive staining intensity should be assessed within the context of any nonspecific background staining of the negative reagent control. As with any IHC test, a negative result means that the antigen was not detected, not that the antigen was absent.

LIMITATIONS

1. Immunohistochemistry is a multi-step process that requires specialized training in the selection of the appropriate reagents; tissue selection, fixation, and processing; preparation of the IHC slide; and interpretation of the staining results.
2. Tissue staining is dependent on the handling and processing of the tissue prior to staining. Improper fixation, freezing, thawing, washing, drying, heating, sectioning, or contamination with other tissues or fluids may produce artifacts, antibody trapping, or false negative results. Inconsistent results may be due to variations in fixation and embedding methods, or to inherent irregularities within the tissue.
3. Excessive or incomplete counterstaining may compromise proper interpretation of results.
4. The clinical interpretation of any positive or negative staining should be evaluated within the context of clinical presentation, morphology and other histopathological criteria. The clinical interpretation of any positive or negative staining should be complemented by morphological studies using proper positive and negative internal and external controls as well as other diagnostic tests. It is the responsibility of a qualified pathologist who is familiar with the proper use of IHC antibodies, reagents, and methods to interpret all of the steps used to prepare and interpret the final IHC preparation.
5. Predilute Ready-to-Use antibodies are provided at optimal dilution for use following the recommended instructions for IHC on prepared tissue sections preparation. Any deviation from recommended test procedures may invalidate declared expected results; appropriate controls must be employed and documented. Users who deviate from recommended test procedures must accept responsibility for interpretation of patient results under these circumstances.
6. This product is not intended for use in flow cytometry. Performance characteristics have not been determined for flow cytometry.
7. Tissues from persons infected with hepatitis B virus and containing hepatitis B surface antigen (HBsAg) may exhibit nonspecific staining with horseradish peroxidase.
8. Reagents may demonstrate unexpected reactions in previously untested tissues. The possibility of unexpected reactions even in tested tissue groups cannot be completely eliminated due to biological variability of antigen expression in neoplasms, or other pathological tissues. Contact Bio SB Customer Support with documented unexpected reaction(s).
9. Normal/non-immune sera from the same animal source as secondary antisera used in blocking steps may cause false-negative or false-positive results due to autoantibodies or natural antibodies.
10. False-positive results may be seen due to non-immunological binding of proteins or substrate reaction products. They may also be caused by pseudoperoxidase activity (erythrocytes), endogenous peroxidase activity (cytochrome C), endogenous phosphatase (e.g., lymphoid, intestinal, placenta), or endogenous biotin (e.g., liver, breast, brain, kidney) depending on the type of immunostain used.
11. Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls.

REFERENCES

1. Ishii Y, Takami T, Yuasa H, Takei T, Kikuchi K. Two distinct antigen systems in human B lymphocytes: identification of cell surface and intracellular antigens using monoclonal antibodies. *Clin Exp Immunol.* 1984;58(1):183-192.
2. Davey FR, Gatter KC, Ralfkiaer E, Pulford KA, Krissansen GW, Mason DY. Immunophenotyping of non-Hodgkin's lymphomas using a panel of antibodies on paraffin-embedded tissues. *Am J Pathol.* 1987;129(1):54-63.
3. Mason DY. A new look at lymphoma immunohistology. *Am J Pathol.* 1987;128(1):1-4.
4. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012. https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

SYMBOLS GLOSSARY

The following symbols may be found in this IFU or on the product labeling. Some glossary symbols may not be applicable to this product.

Source	Symbol	Meaning
ISO 15223-1 5.1.1		Manufacturer
ISO 15223-1 5.1.2		Authorized representative in the European Union
ISO 15223-1 5.1.4		Use-by-Date
ISO 15223-1 5.1.5		Batch Code (Lot Number)
ISO 15223-1 5.1.6		Catalog Number
ISO 15223-1 5.1.8		Importer
ISO 15223-1 5.3.7		Temperature Limit
ISO 15223-1 5.4.3		Consult electronic Instructions for Use
ISO 15223-1 5.4.4		Caution
ISO 15223-1 5.5.1		In Vitro Diagnostic Medical Device
ISO 15223-1 5.7.10		Unique Device Identifier
(EU) 2017/746 *In Vitro* Diagnostic Regulation (IVDR)		European Union Conformity
Bio SB Manufacturer symbol		Ready-To-Use; reagent is provided at a prediluted concentration that is ready for use
Bio SB Manufacturer symbol		Reagent is provided as a concentrate that needs to be diluted for use

CONTACT INFORMATION

Contact Bio SB Customer Support:
US & Canada Telephone +1 (805) 692-2768
International Telephone +1 (800) 561-1145
Email: support@biosb.com | Website: www.biosb.com
Fax: (805) 692-2769

Printed IFU
Available upon request.

Note For Customers Within The European Union (EU):
Any serious incident that has occurred in relation to the device must be reported to Bio SB or local sales representative and the competent authority of the Member State in which the user and/or the patient is established.

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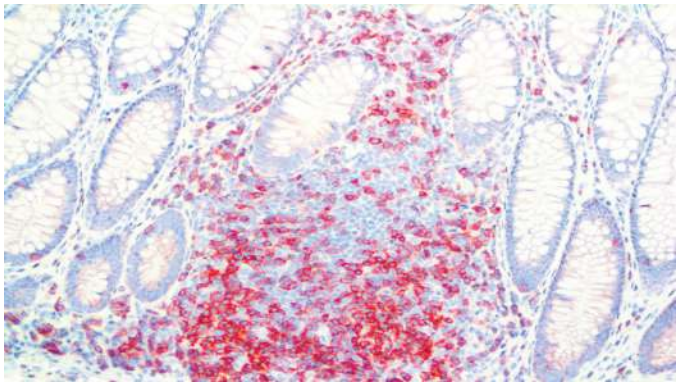
Santa Barbara, CA 93111 USA

QAdvis EAR AB
Ideon Science Park
Scheelevägen 17
SE-223 70 Lund, Sweden

CD3

Clone: RBT-CD3
Rabbit Monoclonal

CE IVD



Inset: IHC of CD3 on a FFPE Colon Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
Synthetic peptide corresponding to residues in the cytoplasmic domain of the human CD3 protein.

Summary and Explanation
The CD3 antigen is a protein complex composed of three distinct chains (CD3γ, CD3δ and CD3ε) that associate with T-cell receptors and the ζ-chain to generate an activation signal in T-lymphocytes. The TCR, ζ-chain and CD3 molecules together comprise the TCR complex. The CD3γ, CD3δ, and CD3ε chains are highly-related

cell surface proteins of the immunoglobulin superfamily containing a single extracellular immunoglobulin domain. The intracellular tails of the CD3 molecules contain a single conserved motif known as an immunoreceptor tyrosine-based activation motif (or ITAM for short), which is essential for the signaling capacity of the TCR. Phosphorylation of the ITAM on CD3 renders the CD3 chain capable of binding the enzyme ZAP70 (zeta-associated protein), a kinase important in the signaling cascade of the T-cell.
CD3 has been considered the best all-around T-cell marker. This antibody reacts with an antigen present in early thymocytes. The positive staining of this marker may represent a sign of early commitment to the T-cell lineage.

Antibody Type	Rabbit Monoclonal	**Clone**	RBT-CD3
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Membranous	**Species Reactivity**	Human
Control	Tonsil, Lymph Node, Liver, Testis, Kidney, Colon, Spleen, Thymus, Lymphoblastic Lymphoma		
Application	Hodgkin's And Non-Hodgkin Lymphoma, Lymphoma		

Presentation
Anti-CD3 is a rabbit monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 6422	Predilute	Ready-to-Use	3.0 mL
BSB 6423	Predilute	Ready-to-Use	7.0 mL
BSB 6424	Predilute	Ready-to-Use	15.0 mL
BSB 6425	Concentrate	1:50-1:200	0.1 mL
BSB 6426	Concentrate	1:50-1:200	0.5 mL
BSB 6427	Concentrate	1:50-1:200	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9082-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label.
Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Denning SM, et al. Oxford Univ Press. 1987;144-147
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7. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012.
https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

EC REP QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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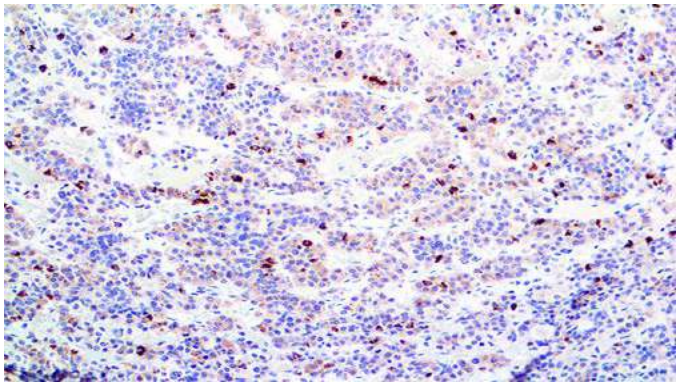
CD25

Clone: RBT-CD25
Rabbit Monoclonal

CE IVD



Inset: IHC of CD25 on a FFPE Pituitary Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
A synthetic peptide corresponding to human the C-terminus of human CD25.

Summary and Explanation
CD25 is the alpha chain of the IL-2 receptor. It is a type I transmembrane protein present on activated T cells, activated B cells, some thymocytes, myeloid precursors, and oligodendrocytes that associates with CD122 to form a heterodimer that can act as a high-affinity receptor for IL-2. Studies have shown that a large proportion of resting memory T cells constitutively express CD25.

CD25 is expressed in most B-cell neoplasms, some acute nonlymphocytic leukemias, neuroblastomas, and tumor infiltrating lymphocytes. Its soluble form, called sIL-2R may be elevated in these diseases and is occasionally used to track disease progression. CD25 is also utilized in cases of mastocytosis.

Antibody Type	Rabbit Monoclonal	**Clone**	RBT-CD25
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic, Membranous	**Species Reactivity**	Human
Control	Tonsil, Small Bowel, Spleen, Mastocytosis, Hodgkin's Lymphoma		
Application	Leukemia & Histiocytic, Lymphoma, Liver Cancer, Melanoma & Skin Cancer		

Presentation
Anti-CD25 is a rabbit monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 2454	Predilute	Ready-to-Use	3.0 mL
BSB 2455	Predilute	Ready-to-Use	7.0 mL
BSB 2456	Predilute	Ready-to-Use	15.0 mL
BSB 2457	Concentrate	1:10-1:50	0.1 mL
BSB 2458	Concentrate	1:10-1:50	0.5 mL
BSB 2459	Concentrate	1:10-1:50	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9081-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to the Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Janeway CA Jr, Travers P, Walport M, et al. Immunobiology: The Immune System in Health and Disease. 5th edition. New York: Garland Science; 2001.
2. Triplett, Todd A.; et al. (July 2012). "Defining a functionally distinct subset of human memory CD4+ T cells that are CD25POS and FOXP3NEG". European Journal of Immunology 42 (7): 1893.
3. Hahn HP. et. al, Am. Journal Surg. Pathology 2007. Nov; 31(11):1669 - 1676.
4. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012.
https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

EC REP QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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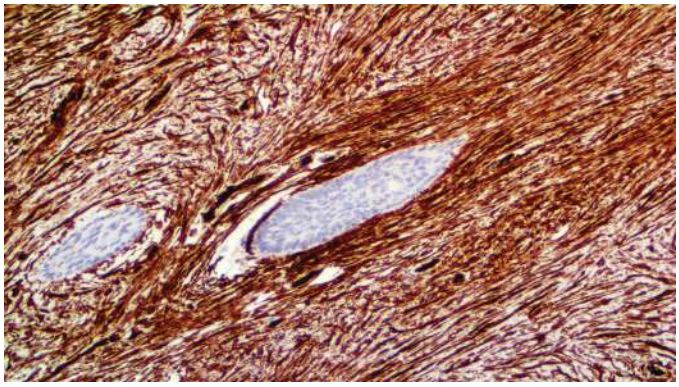
CD34

Clone: EP88
Rabbit Monoclonal

CE IVD



Inset: IHC of CD34 on a FFPE Angiosarcoma Tissue

Antibody Type	Rabbit Monoclonal	**Clone**	EP88
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic, Membranous	**Species Reactivity**	Human, Predicted: Mouse, Rat, Sheep, Dog, Pig, Loxodonta Africana
Control	Tonsil, Placenta, Appendix		
Application	Endothelial, Hematopoietic, Leukemia & Histiocytic, Sarcoma & Soft Tissue, Liver Cancer, Gastrointestinal Stromal Tumor, Colon & Gastrointestinal Cancer, Undifferentiated Tumor		

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

* The CD34 antibody, clone EP88, has been manufactured using Epitomics RabMab® technology covered under Patent No.'s 5,675,063 and 7,402,409.

Immunogen
A synthetic peptide corresponding to C-terminal of human CD34 protein.

Summary and Explanation
CD34 functions as a cell-cell adhesion factor and cell-surface glycoprotein. It may also mediate the attachment of stem cells to bone marrow extracellular matrixes or directly to stromal cells. Cells expressing CD34 are normally found in the umbilical cord and bone marrow as hematopoletic cells, and in vascular endothelium. In addition to stem cell recognition, CD34 is expressed by vascular endothelium; it appears that proliferating endothelial cells express this molecule in greater amounts than resting cells. In comparison to factor VIII R Antigen, CD34 stains are stronger and appear to be more sensitive in nature.
In tumors, CD34 is found in Alveolar Soft Part Sarcoma, pre B-ALL (positive in 75%), AML(40%), AMLM7 (most), Dermatofibrosarcoma Protuberans, Gastrointestinal Stromal Tumors, Giant Cell Fibroblastoma, Granulocytic Sarcoma, Kaposi's Sarcoma, Liposarcoma, Malignant Fibrous Histiocytoma, Malignant Peripheral Nerve Sheath tumors, Mengingeal Hemangiopericytomas, Meningiomas, Neurofibromas, Schwannomas, and Papillary Thyroid Carcinoma. A negative CD34 may exclude Ewing's Sarcoma/PNET, Myofibrosarcoma of the breast, and Inflammatory Myofibroblastic tumors of the stomach.

Presentation
Anti-CD34 is a rabbit monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 6485	Predilute	Ready-to-Use	3.0 mL
BSB 6486	Predilute	Ready-to-Use	7.0 mL
BSB 6487	Predilute	Ready-to-Use	15.0 mL
BSB 6488	Concentrate	1:50-1:200	0.1 mL
BSB 6489	Concentrate	1:50-1:200	0.5 mL
BSB 6490	Concentrate	1:50-1:200	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9087-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability

This product is stable up to the expiration date on the product label.
Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation

Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.
6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Civin CL, et al. London Academic Press. 1989:818-825
2. Fina L, et al. Blood. 1990;75:2417-2426
3. Ramani P, et al. Histopathology. 1990;17:237-242
4. Aziza J, et al. Am J Clin Pathol. 1990;96:25-31
5. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012.
https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

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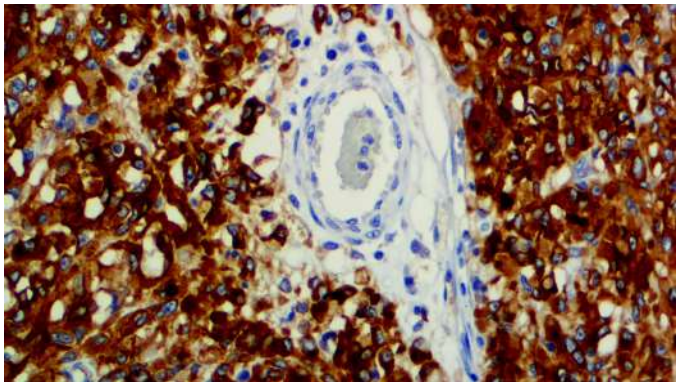
CD117

Clone: RM359
Rabbit Monoclonal

CE IVD



Inset: IHC of CD117 on a FFPE Gastrointestinal Stromal Tumor *Tissue*

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
A peptide corresponding to the C-terminus of human CD117/c-Kit.

Summary and Explanation
CD117 is a tyrosine-kinase receptor for stem cell factor (SCF), also known as "steel factor" or "c-kit ligand". C-kit is a polypeptide that activates bone marrow precursors of a number of blood cells, but its receptor is also present in other cells. C-kit mutations in the interstitial cells of Cajal in the digestive tract are probably the key to Gastrointestinal Stromal Tumors (GISTs), and explain the efficacy of imatinib in the management of these rare malignancies.

CD117 is found on interstitial cells of Cajal, germ cells, bone marrow stem cells, melanocytes, breast epithelium and mast cells. This receptor is found on a wide variety of tumor cells (Follicular and Papillary Carcinoma of the Thyroid, Adenocarcinomas from endometrium, lung, ovary, pancreas, breast; Malignant Melanoma, Endodermal Sinus Tumor, Small-cell Carcinoma) but has been particularly useful in differentiating Gastrointestinal Stromal Tumors (GIST) from Kaposi's Sarcoma and tumors of smooth-muscle origin.

Antibody Type	Rabbit Monoclonal	**Clone**	RM359
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic, Membranous, Nuclear	**Species Reactivity**	Human, Monkey, Predicted: Marmoset
Control	Skin, Testis, Breast, Gastrointestinal Stromal Tumor, Colon, Brain, Tonsil		
Application	Gastrointestinal Stromal Tumor, Cervical Cancer, Colon & Gastrointestinal Cancer, Germ Cell Tumor, Head & Neck Cancer, Kidney & Urothelial Cancer, Leukemia & Histiocytic, Sarcoma & Soft Tissue, Thyroid & Parathyroid Cancer, Undifferentiated Tumor		

Presentation
Anti-CD117 is a Rabbit Monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB-3758-3	Predilute	Ready-to-Use	3.0 mL
BSB-3758-7	Predilute	Ready-to-Use	7.0 mL
BSB-3758-15	Predilute	Ready-to-Use	15.0 mL
BSB-3758-01	Concentrate	1:100-1:500	0.1 mL
BSB-3758-05	Concentrate	1:100-1:500	0.5 mL
BSB-3758-1	Concentrate	1:100-1:500	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9061-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label.
Do not use after expiration date listed on the package label. Temperature fluctuations should be avoided. Store appropriately when not in use, and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should

remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain / Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Sircar K, et al. AM J Surg Pathol. 1999;23(4):377-389
2. Miettinen M, et al. Am J Surg Pathol. 2000;24(2):211-222
3. Arber DA, Tamayo R, Weiss LM, Hum Pathol. 1998May;29(5):498-504
4. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.

Symbol Key / Légende des symboles/Erläuterung der Symbole

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IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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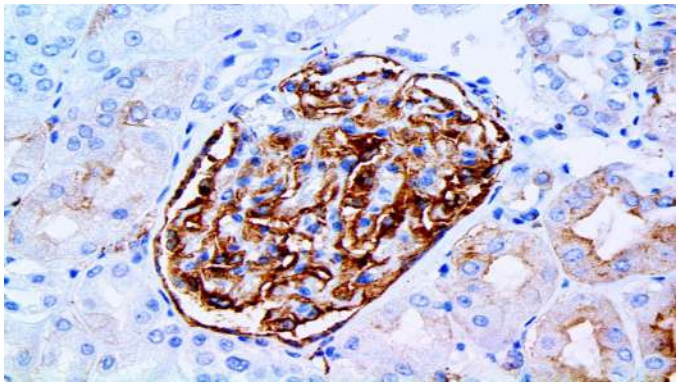
CD61

Clone: EP65
Rabbit Monoclonal

CE IVD



Inset: IHC of CD61 on a FFPE Kidney Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
A synthetic peptide corresponding to residues of human CD61 protein.

Summary and Explanation
CD61 is a glycoprotein found on megakaryocytes (bone marrow cells), platelets and their precursors. CD61 antigen plays a role in platelet aggregation and also as a receptor for fibrinogen, fibronectin, von Willebrand factor and vitronectin.

CD61 labels the IIIa subunit of the noncovalently-linked glycoprotein heterodimer IIb/IIIa complex present on human platelets and their precursors. This antibody is useful in identifying megakaryoblastic differentiation as seen in Megakaryoblastic Leukemia.

Antibody Type	Rabbit Monoclonal	**Clone**	EP65
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic	**Species Reactivity**	Human
Control	Brain, Kidney, Testis, Bone Marrow		
Application	Leukemia & Histiocytic		

Presentation
Anti-CD61 is a Rabbit Monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 3511	Predilute	Ready-to-Use	3.0 mL
BSB 3512	Predilute	Ready-to-Use	7.0 mL
BSB 3513	Predilute	Ready-to-Use	15.0 mL
BSB 3514	Concentrate	1:100-1:500	0.1 mL
BSB 3515	Concentrate	1:100-1:500	0.5 mL
BSB 3516	Concentrate	1:100-1:500	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9103-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to the Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain / Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Thiele J, et al. Eur J Haematol. 1990;44:63-70
2. Thiele J, et al. Virchows Archiv B Cell Pathol. 1990;58:295-302
3. Goldman BI, et al. Modern Pathology. 2001;14:589-594
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9. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.
https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key / Légende des symboles/Erläuterung der Symbole

EC REP — QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF — Catalog Number Référence du catalogue Bestellnummer
IVD — In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT — Lot Number Code du lot Chargenbezeichnung

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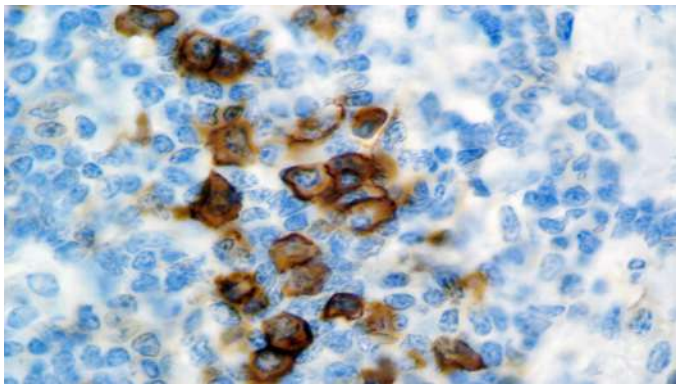
CD38

Clone: SPC32
Mouse Monoclonal

CE IVD



Inset: IHC of CD38 on a FFPE Tonsil Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
Recombinant protein encoding the extracellular domain of human CD38.

Summary and Explanation
CD38 is a glycoprotein found on the surface of many immune cells (white blood cells), including CD4+, CD8+, B and natural killer cells. It is a marker of cell activation. The CD38 protein has been connected to HIV infection, Leukemias, Myelomas, solid tumors, Type II Diabetes Mellitus and bone metabolism, as well as some genetically-determined conditions. It has also been used as a prognostic marker in Leukemia. CD38 is highly expressed on thymocytes. It is also expressed by early cells of B and T lineages, NK cells, plasma cells, monocytes and macrophages, and may be detected on cells from Multiple Myeloma, ALL (B and T) and some AML.

Monoclonal antibodies to CD38 have been shown to be useful in subtyping of Lymphomas and Leukemias, inhibition of B-lymphopoiesis, detection of plasma cells, protection of B-cells from apoptosis, and as a marker for activated B and T-cell proliferation.

Antibody Type	Mouse Monoclonal	**Clone**	SPC32
Isotype	IgG1	**Reactivity**	Paraffin, Frozen
Localization	Membranous	**Species Reactivity**	Human, Rabbit
Control	Tonsil, Lymph Node		
Application	Tonsil, Lymph Node, Spleen, Prostate, Salivary Gland		

Presentation
Anti-CD38 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 6198	Predilute	Ready-to-Use	3.0 mL
BSB 6199	Predilute	Ready-to-Use	7.0 mL
BSB 6200	Predilute	Ready-to-Use	15.0 mL
BSB 6201	Concentrate	1:25-1:100	0.1 mL
BSB 6202	Concentrate	1:25-1:100	0.5 mL
BSB 6203	Concentrate	1:25-1:100	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9089-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Funaro A, Malavasi F, J. Biol. Regul. Homeost. Agents. 1999;13(1):54-61
2. Mallone R, Perin PC, Diabetes Metab. Res. Rev. 2006;22(4):284-94
3. Partida-Sanchez S, et al. Adv. Exp. Med. Biol. 2007;590:171-83
4. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012.
https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

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IVD — In Vitro Diagnostic Medical Device / Dispositif médical de diagnostic in vitro / In-Vitro-Diagnostikum	Read Instructions for Use / Consulter les instructions d'utilisation / Gebrauchsanweisung beachten	Expiration Date / Utiliser jusque / Verwendbar bis	LOT — Lot Number / Code du lot / Chargenbezeichnung

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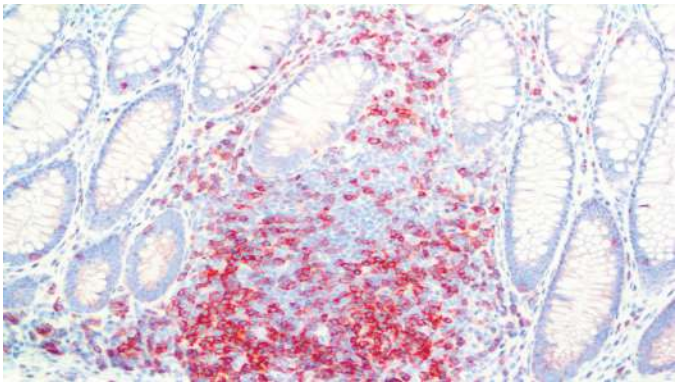
E-mail: sales@biosb.com | Website: www.biosb.com

CD45RO

Clone: UCHL-1
Mouse Monoclonal

CE IVD



Inset: IHC of CD45RO on a FFPE Colon Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
Interleukin-2-dependent human T lymphocytes.

Summary and Explanation
The CD45 family consists of multiple members that are all products of a single complex gene. Three isoforms of CD45 exist: on B-lymphocytes, where the protein is called B220 (its molecular mass is 220 kDA); on naive T-lymphocytes, where it is called CD45RA, and on activated and memory T-lymphocytes, where it is called CD45RO. CD45RO is a single-chain, transmembranous glycoprotein which represents the low molecular weight isoform of the Leukocyte Common Antigen (LCA). It is expressed on most thymocytes, about 45% of peripheral blood T-cells, virtually all T-cells in skin reactive infiltrates, and the majority of T-cell malignancies. It is also found on a subset of B-cells and on exceptional B-cell Lymphomas.

CD45RO (T-Cell, Pan) antibody reacts with thymocytes and activated T-cells, but only on a subpopulation of resting T-cells. This antibody shows no reactivity with B-cells, making it a good marker for T-cell tumors to be phenotyped. In addition, granulocytes and monocytes are also labeled with this antibody. T-Cell, Pan has been designated as CD45RO at The International Leukocyte Typing Workshop.

Antibody Type	Mouse Monoclonal	**Clone**	UCHL-1
Isotype	IgG2a/K	**Reactivity**	Paraffin, Frozen
Localization	Membranous	**Species Reactivity**	Human, Mouse, Rat, Non-human Primate
Control	Tonsil, Lymph Node		
Application	Lymphoma, Breast Cancer, Colon & Gastrointestinal Cancer, Kidney & Urothelial Cancer		

Presentation
Anti-CD45RO is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 5260	Predilute	Ready-to-Use	3.0 mL
BSB 5261	Predilute	Ready-to-Use	7.0 mL
BSB 5262	Predilute	Ready-to-Use	15.0 mL
BSB 5263	Concentrate	1:250-1:1000	0.1 mL
BSB 5264	Concentrate	1:250-1:1000	0.5 mL
BSB 5265	Concentrate	1:250-1:1000	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9098-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1 Hall PA, et al. J Clin Path. 1987;40:151-156
2. Smith SH, et al. Immunology. 1986;58:63-70
3. Tworek JA, et al. Am J Clin Pathol. 1998;Nov;110(5):582-589
4. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012.
https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

EC REP QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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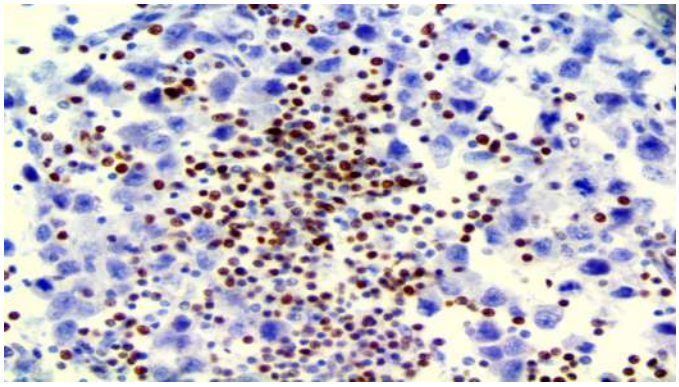
LEF-1

Clone: EP310
Rabbit Monoclonal

CE IVD



Inset: IHC of LEF-1 on a FFPE Testicular Carcinoma Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified medical professional.

* The LEF-1 antibody, clone EP310, has been manufactured using Epitomics RabMab® technology covered under Patent No. 's 5,675,063 and 7,402,409.

Immunogen
Synthetic peptide corresponding to residues of human LEF-1 protein.

Summary and Explanation
Lymphoid enhancer-binding factor 1 (LEF1) is a protein that in humans is encoded by the LEF-1gene with a 48-kD nuclear protein that is expressed in pre-B and T cells. LEF-1 coupling with β-catenin, functions as a key nuclear mediator of WNT/β-catenin signaling, which regulates cell proliferation and survival. LEF-1 has an important role in lymphopoiesis and is normally expressed in T and pro-B cells but not mature B cells. LEF1-mediated canonical Wnt signaling is required for morphogenesis of these skin appendages during embryogenesis. In normal lymphoid tissues, LEF-1 is nuclear localized and observed predominantly in T cells of the paracortical regions; staining was undetected in B cells.
LEF-1 is highly overexpressed and associated with disease progression and poor prognosis in B-cell chronic lymphocytic leukemia. Strong nuclear expression of LEF1 has been observed in majority of chronic lymphocytic leukemia/small lymphocytic lymphoma cases and LEF-1 is not detected in other small B cell lymphomas. Gene expression profiling revealed overexpression of LEF-1 in chronic lymphocytic leukemia (CLL)/small lymphocytic lymphoma (SLL). LEF-1 immunostaining has been detected in all neoplastic cells of CLL/SLL cases. LEF-1 was identified in 50% of high grade follicular lymphoma and 38% of diffuse large B-cell lymphoma, but not in mantle cell lymphoma or marginal zone lymphoma. Recently, high LEF-1 was demonstrated as a favorable prognostic marker in cytogenetically normal acute myeloid leukemia. Due to its high sensitivity, LEF-1 has been proposed to be a suitable immunohistochemical marker for diagnosis and differential diagnosis for CLL/SLL.
Alternately spliced isoforms may play additional roles in regulating cell growth in colon carcinoma, and nuclear LEF-1 immunostaining was detected in 36% of adenocarcinoma brain metastases.

Antibody Type	Rabbit Monoclonal	**Clone**	EP310
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Nuclear	**Species Reactivity**	Human
Control	Breast, Tonsil, Breast Carcinoma, Small Lymphocytic Lymphoma Langerhans Histiocytosis		
Application	Leukemia & Histiocytic, Lymphoma, Colon & Gastrointestinal Cancer, Brain Cancer		

Presentation
Anti-LEF-1 is a Rabbit Monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 3377	Predilute	Ready-to-Use	3.0 mL
BSB 3378	Predilute	Ready-to-Use	7.0 mL
BSB 3379	Predilute	Ready-to-Use	15.0 mL
BSB 3380	Concentrate	1:50-1:200	0.1 mL
BSB 3381	Concentrate	1:50-1:200	0.5 mL
BSB 3382	Concentrate	1:50-1:200	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9259-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability

This product is stable up to the expiration date on the product label.
Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation

Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
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5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain / Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

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8. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012. https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key / Légende des symboles/Erläuterung der Symbole

EC REP QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

Bio SB BIOSCIENCE FOR THE WORLD
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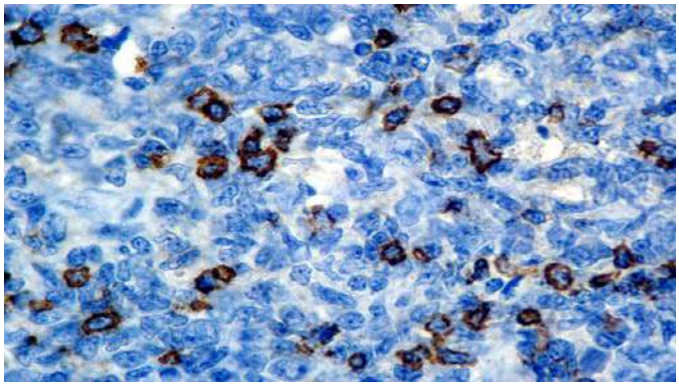
CD57

Clone: BSB-10
Mouse Monoclonal

CE IVD



Inset: IHC of CD57 on a FFPE Tonsil Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
Synthetic peptide corresponding to residues of human CD57 protein.

Summary and Explanation
CD57 (NK-1) recognizes an oligosaccharide (MW 100-110 kDa) antigenic determinant on myeloid cells and on a variety of polypeptides, lipids and chondroitin sulfate proteoglycans. This surface antigen is associated with myelin-associated glycoprotein (MAG). The CD57 antigen is present on 15-20% of normal peripheral blood mononuclear cells. It is expressed on a subset of natural killer cells (60%) and on a subset of T-lymphocytes. This carbohydrate is also present on N-CAM in the nervous system.

Follicular Center-cell Lymphomas often contain many NK cells within the neoplastic follicles. NK-1 reportedly also reacts with a variety of cell types in non-lymphoid tissues. NK-1 stains neuroendocrine cells and their tumors, including Carcinoid Tumor and Medulloblastomas. NK-1 also reacts with a variety of cell types in non-lymphoid tissues, including Neurofibroma, Ganglioneuroma, and Prostate Carcinoma.

Antibody Type	Mouse Monoclonal	**Clone**	BSB-10
Isotype	IgG1/K	**Reactivity**	Paraffin, Frozen
Localization	Membranous	**Species Reactivity**	Human, Dog, Cat
Control	Tonsil, Lymph Node		
Application	Hodgkin's And Non-Hodgkin Lymphoma, Neural & Neuroendocrine Cancer, Kidney & Urothelial Cancer		

Presentation
Anti-CD57 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 5274	Predilute	Ready-to-Use	3.0 mL
BSB 5275	Predilute	Ready-to-Use	7.0 mL
BSB 5276	Predilute	Ready-to-Use	15.0 mL
BSB 5277	Concentrate	1:100-1:500	0.1 mL
BSB 5278	Concentrate	1:100-1:500	0.5 mL
BSB 5279	Concentrate	1:100-1:500	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9101-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to the Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label.
Do not use after expiration date listed on the package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation

Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on the trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Lanier LL, et al. Journ of Immun. 1983;131(4):1789-1796
2. Ritchie AW, James K, Micklem HS, Clin and Exp Imm. 1983;51(3):439 -447
3. Caillaud JM, et al. Cancer Res. 1984;44(10):4432-4439
4. Tucker, et al. Cell Di! erentiation, 1984;14(3):223-230
5. Abo T, et al. Cellular Immun. 1982;73(2):376-384
6. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012. https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

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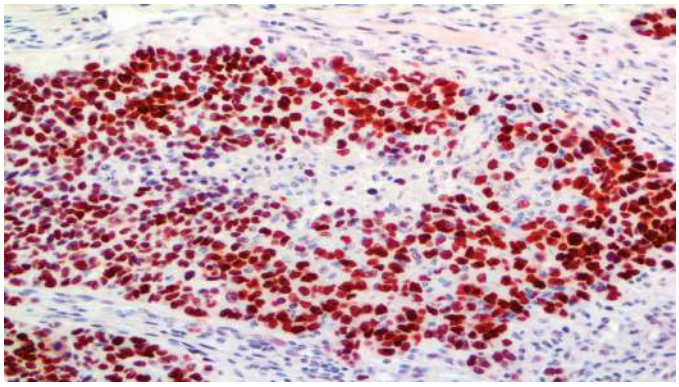
p53

Clone: DO7
Mouse Monoclonal

CE IVD



Inset: IHC of p53 on a FFPE Breast Carcinoma Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
Recombinant human wild-type p53 protein.

Summary and Explanation
p53 (also known as tumor protein 53 [TP53]) is a transcription factor that regulates the cell cycle and, hence, functions as a tumor suppressor. p53 has been described as the "guardian of the genome", referring to its role in conserving stability by preventing genome mutation. p53 has many anti-cancer mechanisms. It can
activate DNA repair proteins when DNA has sustained damage; it can also hold the cell cycle at the G1/S regulation point on DNA damage recognition. It can initiate apoptosis, programmed cell death, if DNA damage proves to be irreparable. p53 is central to many of the cell's anti-cancer mechanisms. It can induce growth arrest, apoptosis and cell senescence.

Mutations involving p53 have been found in a wide variety of malignant tumors, including Breast, Ovarian, Bladder, Colon, Lung, and Melanoma.

Antibody Type	Mouse Monoclonal	**Clone**	DO7
Isotype	IgG2b/K	**Reactivity**	Paraffin, Frozen
Localization	Nuclear	**Species Reactivity**	Human, Cat, Cattle, Horse, Sheep
Control	Lung, Breast, Ovarian, Prostate, Colon Carcinoma		
Application	Breast Cancer, Colon & Gastrointestinal Cancer, Endometrial & Genital Cancer, Liver Cancer		

Presentation
Anti-p53 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 5841	Predilute	Ready-to-Use	3.0 mL
BSB 5842	Predilute	Ready-to-Use	7.0 mL
BSB 5843	Predilute	Ready-to-Use	15.0 mL
BSB 5844	Concentrate	1:250-1:1000	0.1 mL
BSB 5845	Concentrate	1:250-1:1000	0.5 mL
BSB 5846	Concentrate	1:250-1:1000	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9325-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Stoehlmacker J, Lenz Heinz-Josef, Semin Oncol. 2003;30(3)suppl6(June):10-16
2. Gallo O, et al. Hum Pathol. 33:708-714
3. Sano H, et al. Cancer Res. 1995;Sep1; 55(17):3785-9
4. Denkert C, et al. Cancer. 2003;Jun15; 97(12):2978-87
5. Sheehan KM, et al. Hum Pathol. 34:1242-1246
6. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012. https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

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IVD In Vitro Diagnostic Medical Device / Dispositif médical de diagnostic in vitro / In-Vitro-Diagnostikum	Read Instructions for Use / Consulter les instructions d'utilisation / Gebrauchsanweisung beachten	Expiration Date / Utiliser jusque / Verwendbar bis	LOT Lot Number / Code du lot / Chargenbezeichnung

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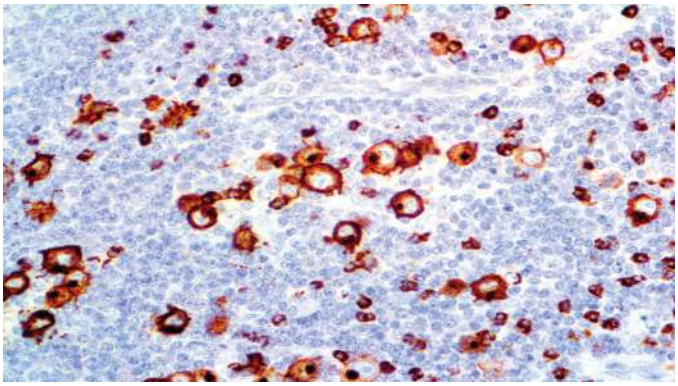
CD15

Clone: BSB-119
Mouse Monoclonal

CE IVD



Inset: IHC of CD15 on a FFPE Hodgkin's Lymphoma Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
The U937 histiocytic cell line was used as the immunogen for the CD15 Leu-M1 antibody.

Summary and Explanation
CD15 is a phosphatidylinositol-anchored transmembrane protein found on neutrophils and which may be involved in phagocytosis. It is expressed in patients with Hodgkin's Disease, some B-cell Chronic Lymphocytic Leukemias, Acute Lymphoblastic Leukemias, and most Acute Non-Lymphocytic Leukemias. It is also called Lewis x.

A positive reaction for CD15 combined with a negative reaction for CD45 and other B and T-lineage markers provides support for Reed-Sternberg cells found in Hodgkin's disease. Also, this antibody does not detect Mesotheliomas, making it a more frequently used antibody to distinguish Epithelial Mesothelioma from Adenocarcinoma.

Antibody Type	Mouse Monoclonal	**Clone**	BSB-119
Isotype	IgM	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic, Membranous	**Species Reactivity**	Human
Control	Tonsil, Lymph Node, Hodgkin's Lymphoma		
Application	Hodgkin's and Non-Hodgkin Lymphoma, Lung Cancer		

Presentation
Anti-CD15 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 5183	Predilute	Ready-to-Use	3.0 mL
BSB 5184	Predilute	Ready-to-Use	7.0 mL
BSB 5185	Predilute	Ready-to-Use	15.0 mL
BSB 5186	Concentrate	1:50-1:200	0.1 mL
BSB 5187	Concentrate	1:50-1:200	0.5 mL
BSB 5188	Concentrate	1:50-1:200	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9072-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on the package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Skubitz K, et al. Oxford Univ Press. 1989:800-805
2. Hsu SM, et al. Am J Clin Path. 1984;82
3. Pinkus GS, et al. Am J Path. 1985;119:244-252
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6. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012. https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

EC REP QAdvis EAR AB Ideon Science Park Scheelevägen 17 SE-223 70 Lund, Sweden	Storage Temperature Limites de température Zulässiger Temperaturbereich	Manufacturer Fabricant Hersteller	REF Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	Expiration Date Utiliser jusque Verwendbar bis	LOT Lot Number Code du lot Chargenbezeichnung

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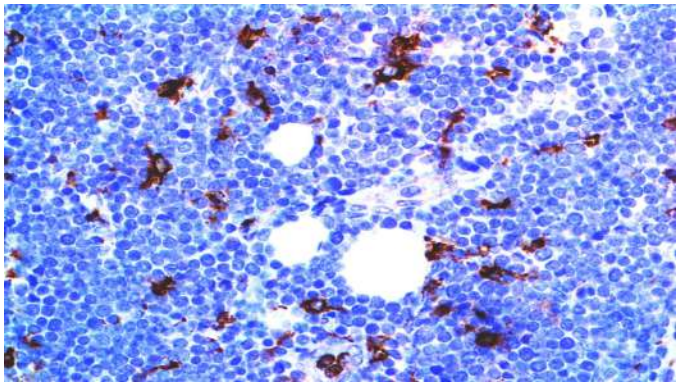
Tel. (805) 692-2768 | Tel. (800) 561-1145 | Fax. (805) 692-2769
E-mail: sales@biosb.com | Website: www.biosb.com

CD68

Clone: KP-1
Mouse Monoclonal

CE IVD



Inset: IHC of CD68 on a FFPE Lymphoblastic Lymphoma Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified medical professional.

Immunogen
Subcellular fraction of human alveolar macrophages.

Summary and Explanation
The CD68 antigen is a heavily glycosylated trans-membrane protein of 87-115 kDa which is specifically expressed by tissue macrophages, Langerhans cells and, at low levels, by dendritic cells. CD68 could play a role in phagocytic activities of tissue macrophages, both in intracellular lysosomal metabolism and extracellular cell-cell and cell-pathogen interactions.

CD68 marks cells of monocyte/macrophage lineage. This antibody is capable of staining monocytes, Kupffer cells, osteoclasts, granulocytes and their precursors; Lymphomas are negative or show a few granules. This antibody may be useful for the identification of Myelomonocytic and Histiocytic Tumors. CD68 may help to distinguish Malignant Fibrous Histiocytoma from other Pleomorphic Sarcomas.
However, since CD68 detects a formalin-resistant epitope that may be associated with lysosomal granules, other lysosome-rich cells may also produce positive results.

Antibody Type	Mouse Monoclonal	**Clone**	KP-1
Isotype	IgG1/K	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic, Membranous	**Species Reactivity**	Human, Hamster, Mouse, Non-Human Primate, Porcine, Rabbit, Rat
Control	Tonsil, Lymph Node		
Application	Leukemia & Histiocytic, Kidney & Urothelial Cancer, Breast Cancer		

Presentation
Anti-CD68 is a Mouse Monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 2712	Predilute	Ready-to-Use	3.0 mL
BSB 2713	Predilute	Ready-to-Use	7.0 mL
BSB 2714	Predilute	Ready-to-Use	15.0 mL
BSB 2715	Concentrate	1:250-1:1000	0.1 mL
BSB 2716	Concentrate	1:250-1:1000	0.5 mL
BSB 2717	Concentrate	1:250-1:1000	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9105-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain / Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Facchetti F, et al. Histopathology. 1991;19:141-5
2. Ruco LP, et al. Am J Clin Pathol. 1989;92:273-9
3. Cordell JL, et al. Oxford-New York-Tokyo: Oxford Univ. Press. 1995;925-927
4. Pulford KAF, et al. J Clin Pathol. 1989;42:414-21
5. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012. https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

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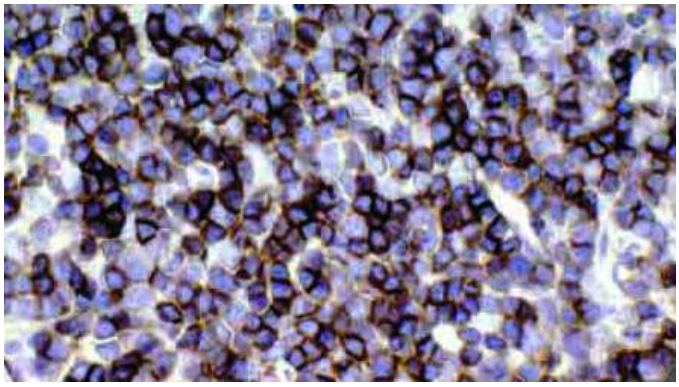
CD1a

Clone: EP80
Rabbit Monoclonal

CE IVD



Inset: IHC of CD1a on a FFPE Thymus Tissue

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

* The CD1a antibody, clone EP80, has been manufactured using Epitomics RabMab® technology covered under Patent No. 's 5,675,063 and 7,402,409.

Immunogen
Synthetic peptide corresponding to residues in human CD1a protein.

Summary and Explanation
CD1 proteins have been demonstrated to restrict T-cell response to non-peptide lipid and glycolipid antigens. At least five CD1 genes (CD1a, b, c, d, and e) have been identified. CD1a belongs to a family of glycoproteins expressed on the surface of various human antigen-presenting cells. In particular, CD1a is a protein of 43 to 49 kDa, and has been shown to be expressed on dendritic cells and cortical thymocytes. Langerhans cells in the skin and some epithelia also express this protein. This antigen is expressed in cells comprising Langerhans Cell Histiocytosis and Langerhans Cell Sarcoma.

Anti-CD1a has been used to differentiate various cutaneous Lymphomas (T-cell) from B-cell Lymphomas and Pseudolymphomas. CD1a is also expressed by some malignancies of T-cell lineage and in Histiocytosis X.

Antibody Type	Rabbit Monoclonal	**Clone**	EP80
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic, Membranous	**Species Reactivity**	Human
Control	Skin,Thymus, Lymphoblastic Lymphoma		
Application	Leukemia & Histiocytic, Lymphoma, Colon & Gastrointestinal Cancer		

Presentation
Anti-CD1a is a rabbit monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 5134	Predilute	Ready-to-Use	3.0 mL
BSB 5135	Predilute	Ready-to-Use	7.0 mL
BSB 5136	Predilute	Ready-to-Use	15.0 mL
BSB 5137	Concentrate	1:50-1:200	0.1 mL
BSB 5138	Concentrate	1:50-1:200	0.5 mL
BSB 5139	Concentrate	1:50-1:200	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9076-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagents. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to the Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label.
Do not use after expiration date listed on the package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation
Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
2. Air dry for 2 hours at 58° C.
3. Deparaffinize, dehydrate, and rehydrate tissues.
4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Pinkus GS, et al. Am J Clin Pathol. 2002;Sep;118(3):335-43
2. Laguens G, et al. Immunol Lett. 2002;Dec 3;84(3):159-62
3. Pileri SA et al. Histopathology. 2002;Jul;41(1);1-29
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6. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012.
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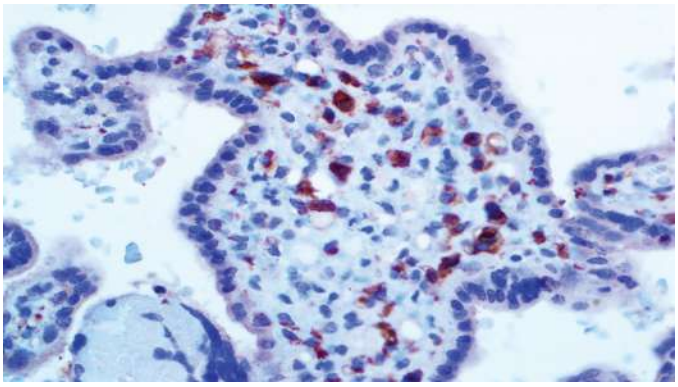
Factor XIIIa

Clone: EP292
Rabbit Monoclonal

CE IVD



Inset: IHC of Factor XIIIa on a FFPE Placenta Tissue

Antibody Type	Rabbit Monoclonal	**Clone**	EP292
Isotype	IgG	**Reactivity**	Paraffin, Frozen
Localization	Cytoplasmic	**Species Reactivity**	Human
Control	Placenta, Testis, Tonsil, Skin, Colon		
Application	Leukemia & Histiocytic, Melanoma & Skin Cancer		

Presentation
Anti-Factor XIIIa is a rabbit monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	*Presentation*	*Dilution*	*Volume*
BSB 5505	Predilute	Ready-to-Use	3.0 mL
BSB 5506	Predilute	Ready-to-Use	7.0 mL
BSB 5507	Predilute	Ready-to-Use	15.0 mL
BSB 5508	Concentrate	1:50-1:200	0.1 mL
BSB 5509	Concentrate	1:50-1:200	0.5 mL
BSB 5510	Concentrate	1:50-1:200	1.0 mL

Control Slides Available

Catalog No.	*Quantity*
BSB-9176-CS	5 slides

Storage Store at 2-8°C (Control Slides: Store at 20-25°C)

Intended Use
For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.

* The Factor XIIIa antibody, clone EP292, has been manufactured using Epitomics RabMab® technology covered under Patent No.'s 5,675,063 and 7,402,409.

Immunogen
Recombinant protein corresponding to A-subunit of coagulation Factor XIII.

Summary and Explanation
Factor XIII or fibrin stabilizing factor is an enzyme of the blood coagulation system that crosslinks fibrin. When thrombin has converted fibrinogen to fibrin, the latter forms a proteinaceous network in which every E-unit is crosslinked to only one D-unit. Factor XIII is activated by thrombin into Factor XIIIa; its activation into
Factor XIIIa requires calcium as a cofactor. Factor XIIIa has been identified in platelets, megakaryocytes, and fibroblast-like mesenchymal or histiocytic cells present in the placenta, uterus, and prostate; it is also present in monocytes, macrophages and dermal dendritic cells.

Anti-Factor XIIIa has been found to be useful in differentiating between Dermatofibroma (90% (+)), Dermatofibrosarcoma Protuberans (25%(+)) and Desmoplastic Malignant Melanoma (0%(+)). Factor XIIIa positivity is also seen in Capillary Hemangioblastoma (100%(+)), Hemangioendothelioma (100%(+)), Hemangiopericytoma (100%(+)), Xanthogranuloma (100%(+)), Xanthoma (100(+)), Hepatocellular Carcinoma (93%(+)), Glomus Tumor (80%(+)), and Meningioma 80%(+)).

Precautions
1. For professional users only. Results should be interpreted by a qualified medical professional.
2. This product contains <0.1% sodium azide (NaN_3) as a preservative. Ensure proper handling procedures are used with this reagent.
3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
4. Dispose of unused solution with copious amounts of water.
5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
8. For additional safety information refer to Safety Data Sheet for this product.
9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability
This product is stable up to the expiration date on the product label.
Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use and avoid prolonged exposure to room temperature conditions.

Specimen Preparation

Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033), or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

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1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
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a. TintoRetriever Pressure Cooker or Equivalent

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b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
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8. Wash slides with ImmunoDNA washer or DI water.
9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

1. Nemes Z, Hum Pathol. 1992;Jul; 23(7):805-10
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3. Horenstein MG, et al. Am J Surg Pathol. 2000;Jul;24(7):996-1003
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5. Dehner LP, Am J Surg Pathol. 2003;May;27(5):579-93
6. Deguchi M, et al. Arch Dermatol Res. 2002;Oct;294(7):297-302
7. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement/Vol. 61, January 6, 2012. https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

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IHC Detection Systems

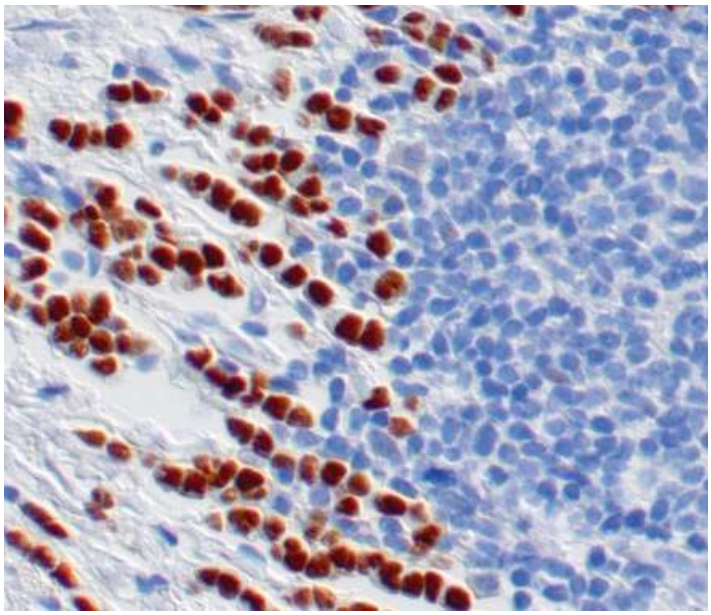
Which detection system is best for your laboratory?

To complement our robust antibody portfolio we offer an array of detection technologies designed to meet the needs of the clinical and research market. The following guide is designed to help you determine the best kit for your application. See the following detection system packages for detailed information on each detection kit. When in doubt you may contact your local representative or our technical service team at lab.reagents@thermofisher.com.

UltraVision Quanto Detection Kit (IVD)

The UltraVision Quanto Detection System utilizes innovative micropolymer technology that enhances sensitivity while reducing costs and turnaround time[2]. This system is optimized for mouse and rabbit antibodies on human specimens and is ideal for routine clinical testing.

Description	REF Num	Use
UltraVision Quanto Detection System AP 60 mL	TL-060-QAL	IVD
UltraVision Quanto Detection System HRP DAB 60 mL	TL-060-QHD	IVD
UltraVision Quanto AP 1 L	TL-999-QAL	IVD
UltraVision Quanto Complete Kit 125 mL	TL-125-QCK	IVD
UltraVision Quanto Complete Kit 60 mL	TL-060-QCK	IVD
UltraVision Quanto Detection System AP 125 mL	TL-125-QAL	IVD
UltraVision Quanto Detection System HRP 125 mL	TL-125-QHL	IVD
UltraVision Quanto Detection System HRP 60 mL	TL-060-QHL	IVD
UltraVision Quanto Detection System HRP DAB 125 mL	TL-125-QHD	IVD
UltraVision Quanto Detection System HRP DAB Sample 15 mL	TL-015-QHD	IVD
UltraVision Quanto HRP 1LTL-999-QPB/QPH and TA-999-PBQ	TL-999-QHL	IVD
UltraVision Quanto HRP DAB 1 L	TL-999-QHD	IVD



[2]NoriQC Review of Technical Test Approach Montreal 2010 http://www.nordiqc.org/seminars/Nielsen-Montreal-08-July-10.pdf

IHC Detection Systems

UltraVision Labeled Polymer (LP) (IVD)

UltraVision LP is the predecessor of UltraVision Quanto. UltraVision LP works well in clinical applications and produces strong, consistent results.

Note: UltraVision LP enhances mouse antibodies but does not enhance rabbit antibodies.

Description	REF Num	Use
Kit PV HRP polymer 1LTL-999-PB/PH and TA-999-PBQ	TL-999-HL	IVD
UltraVision LP HRP Polymer & DAB Chromogen 15 mL	TL-015-HD	IVD
UltraVision LP HRP Polymer & DAB Chromogen 60 mL	TL-060-HD	IVD
UltraVision LP HRP Polymer & DAB Chromogen 125 mL	TL-125-HD	IVD
UltraVision LP Large Vol AP Polymer (RTU) 60 mL	TL-060-AL	IVD
UltraVision LP Large Vol AP Polymer (RTU) 125 mL	TL-125-AL	IVD
UltraVision LP Large Vol HRP Polymer (RTU) 60 mL	TL-060-HL	IVD
UltraVision LP Large Vol HRP Polymer (RTU) 125 mL	TL-125-HL	IVD

IHC Detection Systems

UltraVision ONE (IVD)

UltraVision ONE offers the protocol with the least number of steps and is ideal for clinical applications with frozen section or where few steps are ideal.

Description	REF Num	
UltraVision ONE Large Vol, HRP Polymer (RTU) 125 mL	TL-125-HLJ	IVD
UltraVision ONE Large Vol. AP Polymer (RTU) 125 mL	TL-125-ALJ	IVD
UltraVision ONE, AP Polymer & Fast Red Chromogen 15 mL	TL-015-AFJ	IVD

Multivision (IVD)

The Multivision system is designed for visualizing two antigens on a single slide.

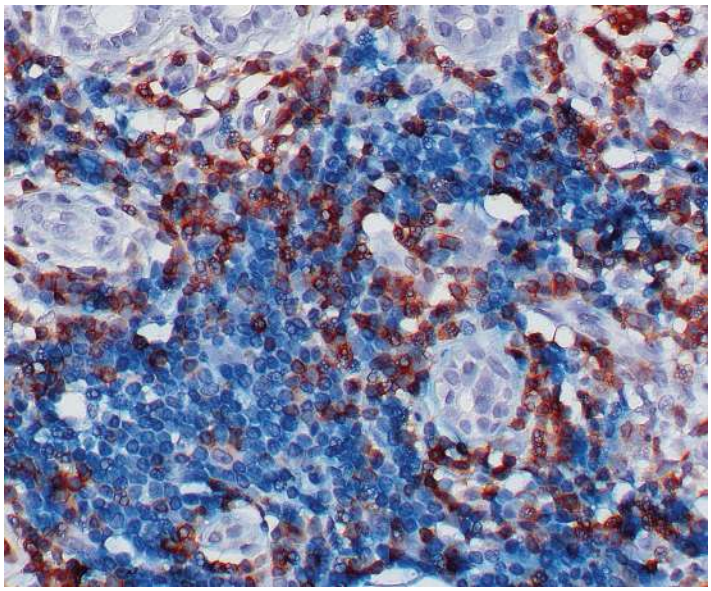
Epredia UltraVision and UltraVision Plus (IVD)

Robust Biotin and Streptavadin System

Epredia UltraVision LP Value (IVD)

Similar technology to UltraVision LP at a more affordable price

Description	REF Num	
MV Polymer/ anti-mouse/ AP+anti Rabbit/HRP 12 mL	TL-012-MARH	IVD
MV Polymer/ anti-mouse/ HRP+anti Rabbit/AP 12 mL	TL-012-MHRA	IVD



IHC Ancillary Products

Description	REF Num	
Antibody Diluent OP Quanto	TA-125-ADQ	IVD
Tween 20 (Polyoxyethelenesorbitan Monolaurate) 125 mL	TA-125-TW	RUO
UltraVision DAB Away 250 mL	TA-250-DA	IVD
UltraVision Protein Blk 125 ml	TA-125-PBQ	IVD
UltraVision Protein Block 60 ml	TA-060-PBQ	IVD
UV Hydrogen Peroxide Block 1 L	TA-999-H2O2Q	IVD
UV Hydrogen Peroxide Block 125 ml	TA-125-H2O2Q	IVD
UV Hydrogen Peroxide Block 60 ml	TA-060-H2O2Q	IVD
FITC Protein Blocking Agent (PBA) 6 mL	TA-006-PBA	IVD
Phosphate Buffered Saline (10X) 10 mL	AP-9009-10	IVD
Phosphate Buffered Saline and Tween 20 Large Vol (20X)	TA-999-PT	IVD
Tris Buffer Saline and Tween 20 Large Vol (20X) 999 mL	TA-999-TT	IVD

Description	REF Num	
Large Vol Phosphate Buffered Saline (25X) 125 mL	TA-125-PB	IVD
Large Vol Phosphate Buffered Saline and Tween 20 (20X) 125 mL	TA-125-PT	IVD
Large Vol Tris Buffer Saline and Tween 20 (20X) 125 mL	TA-125-TT	IVD
Large Vol Tris Buffered Saline (25X) 125 mL	TA-125-TB	IVD
Mayer's Hematoxylin 125 mL	TA-125-MH	IVD
Mayer's Hematoxylin 60 mL	TA-060-MH	IVD
PermaFluor Aqueous Mounting Medium 30 mL	TA-030-FM	IVD
PermaFluor Aqueous Mounting Medium 6 mL	TA-006-FM	IVD
SI Prep, Aqua-Mount 125 mL	TA-125-AM	IVD

Slide clarity – **pure** and **simple**

When conducting immunohistochemistry (IHC) assays, it can be frustrating when pretreated slides come out murky. Incomplete dewaxing can make it feel like you're looking through a dirty window, and can interfere with diagnostics, decrease laboratory efficiency, and drive up operating costs.

Dewax and HIER buffers by Epredia achieve all-in-one epitope retrieval and deparaffinization in the PT Module ahead of IHC. Dewax and HIER buffers demonstrate superior dewaxing performance over other PTM buffers. Unlike other processes, slides are not recoated with molten paraffin, resulting in enhanced clarity in imaging.

Dewax and HIER buffers are color-coded into three pH groups, allowing you to easily differentiate between tanks. All dewax and HIER buffers come pre-measured for ease of use in the PT Module.

For more information on achieving better clarity in your immunohistochemical assays, please contact your local Epredia representative today.

Dewax and HIER buffers come in three pH ranges:

L Dewax and HIER buffer L is a low pH (~6.0) buffer and is citrate-based (orange coloration).

M Dewax and HIER buffer M is a mid pH (~8.0) buffer and is EDTA-based (purple coloration).

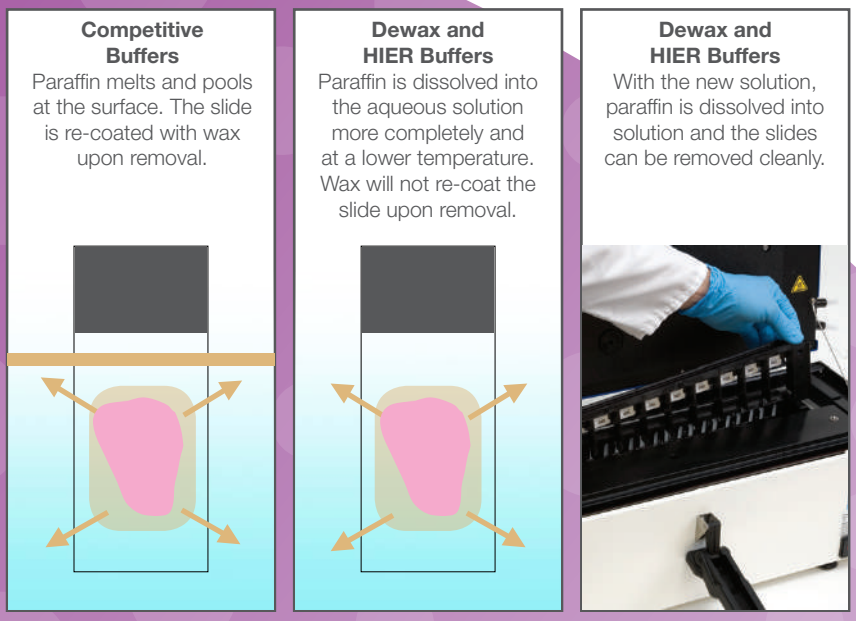
H Dewax and HIER buffer H is a high pH (~9.0) buffer and is Tris-EDTA-based (blue coloration).

Clarity doesn't have to come at a big cost.

Epredia Dewax and HIER Buffers deliver high quality at a competitive cost per slide. Get a clearer picture of how you may be able to save 40% or more per test. Contact your Epredia representative today.

See the difference for yourself.
Contact your Epredia representative today and ask about Dewax and HIER buffers.

Item	Use	REF Num
Dewax and HIER buffer (H, M, L) variety pack	IVD	TA-999-DHBVP
Dewax and HIER buffer H (15x concentrate) 10 x 100 mL	IVD	TA-999-DHBH
Dewax and HIER buffer L (15x concentrate) 10 x 100 mL	IVD	TA-999-DHBL
Dewax and HIER buffer M (15x concentrate) 10 x 100 mL	IVD	TA-999-DHBM



Find out more at **www.epredia.com**

POWERED BY SHANDON MICRON MENZEL-GLÄSER Richard-Allan Scientific

epredia
Enhancing precision cancer diagnostics

epredia Enhancing precision cancer diagnostics

Lame de microscop, adezive
Instrucțiuni de utilizare

Pentru diagnostic in vitro.

Pentru utilizare numai de către profesioniști instruiți.

Utilizarea prevăzută

Lamele adezive atrag electrostatic secțiuni de țesut încorporate în parafină proaspete, congelate și fixate cu formol, legându-le de lama destinată utilizării diagnostice

Informații generale

- Lamele de microscop sunt potrivite pentru prepararea eșantioanelor de celule și țesut
- Lamele de microscop trebuie aduse la temperatura camerei înainte de a fi utilizate
- Lamele de microscop sunt de unică folosință
- Lamele de microscop trebuie folosite pe suprafața de lucru
- Dacă din orice motiv considerați că rezultatul testului dumneavoastră este echivoc, ar trebui să urmați procedurile standard de operare ale laboratorului dumneavoastră
- Când utilizați lamele de microscop în instrumente, trebuie respectate instrucțiunile de utilizare oferite de producător privind utilizarea în siguranță a instrumentului, coloranților și substanțelor chimice ale acestuia

Instrucțiuni

- Plutiți secțiunile de țesut cu grosimea de 2 până la 5 microni pe o baie de flotație preîncălzită, care este umplută cu apă distilată. NU adăugați adeziv sau soluție de acoperire în baia de flotație. Pretratarea lamelor adezive elimină necesitatea utilizării acestor componente
- Montați secțiunile cu atenție prima dată, deoarece legarea țesuturilor începe rapid
- Uscați lamele complet la temperatura camerei, scurgându-le pe verticală înainte de a le încălzi în cuptor sau pe o plită
- Puteți înlocui apa distilată cu apă de la robinet în baia de flotație, dar dacă începeți să pierdeți secțiuni de țesut, utilizați apă distilată

Avertismente și precauții

- Fiți conștienți de posibilitatea de rupere atunci când aveți de-a face cu lamele de microscop și luați măsurile de siguranță adecvate, de exemplu putați mănuși și protecție pentru ochi
- Nu utilizați lamele de microscop dacă termenul de valabilitate al acestora a expirat
- Nu utilizați lamele de microscop dacă produsul este deteriorat

Atenție

⚠ Probele umane pot prezenta un risc biologic. Urmați procedurile standard pentru manipularea, depozitarea și eliminarea probelor umane

Depozitare, arhivare și eliminare

- Păstrați produsul în condiții curate și uscate la temperatura ambiantă (15-30 °C)
- Produsul trebuie ținut departe de podea, uși și conducte de încălzire/aer condiționat pentru a minimiza schimbările de temperatură și umiditate
- Evitați variațiile mari de temperatură atât în timpul depozitării, cât și în timpul utilizării. Răcirea lamelor de microscop poate duce la formarea condensului între bucățile de sticlă, ceea ce poate afecta performanța
- Lamele de microscop trebuie lăsate să ajungă la temperatura camerei în laborator înainte de a fi deschise
- Stocul de produse trebuie rotit. Rotația este prima linie de apărare împotriva schimbărilor de temperatură și umiditate care au ca rezultat contaminarea cu umezeală. Utilizați mai întâi produsele mai vechi aflate în depozit, folosind principiul FIFO (primul intrat, primul ieșit)
- Arhivați, depozitați și eliminați lamele de microscop conform protocoalelor de laborator stabilite
- Perioada de depozitare a lamelor: consultați data de expirare

Notă:

Orice incident grav care a avut loc în legătură cu dispozitivul trebuie raportat producătorului și autorității competente a statului membru în care este stabilit utilizatorul și/sau pacientul.

Anexă: Articole aplicabile

Numărul de articol	Denumirea produsului
REF J1810AMNZTR	Superfrost Plus™ blue
REF J1860ARLX	Superfrost Plus™ violet
REF J7840AMNZ	Superfrost Plus™ green CC
REF J1800AMNZ	Superfrost Plus™ white
REF J1800ABDH	Superfrost Plus™ white
REF J1800ARLX	Superfrost Plus™ white
REF J2800AMNZ	Polysine™ white
REF J1830AMNZ	Superfrost Plus™ yellow
REF J1810AMNZ	Superfrost Plus™ blue
REF J1800AAUT	Superfrost Plus™ white
REF J1820AMNZ	Superfrost Plus™ pink
REF J1800AHTX	Superfrost Plus™ white
REF J1840AMNZ	Superfrost Plus™ green
REF J7800AMNZ	Superfrost Plus™ white CC
REF J2800ABDH	Polysine™ white
REF J1800AMNZTR	Superfrost Plus™ white
REF J1810ABDH	Superfrost Plus™ blue
REF J5800AMNZ	Superfrost™ Excell white
REF J1820ABDH	Superfrost Plus™ pink
REF J1830ABDH	Superfrost Plus™ yellow
REF J1840ABDH	Superfrost Plus™ green
REF J7850AMNZ	Superfrost Plus™ orange CC
REF J2800ARLX	Polysine™ white
REF J1810ARLX	Superfrost Plus™ blue
REF J1850AMNZ	Superfrost Plus™ orange
REF J1800BMNZ	Superfrost Plus™ 51 x 75 mm
REF J1830ARLX	Superfrost Plus™ yellow
REF J7840ARLX	Superfrost Plus™ green CC
REF J2800AHTX	Polysine™ white
REF J1840ARLX	Superfrost Plus™ green
REF J1820ARLX	Superfrost Plus™ pink
REF J1800CMNZ	Superfrost Plus™ 38 x 75 mm
REF J1850ARLX	Superfrost Plus™ orange
REF J1860AMNZ	Superfrost Plus™ violet
REF J6409741WGYPLUS	Capillary-gap Slides gray 75 µm
REF J6815741WPLUS	Capillary-gap Slides blue 100 µm
REF K5800AMNZ72	Superfrost Plus™ GOLD white
REF X5ES2030LAD1	Diagnostic Specialty Slides
REF X5ES2115BAD1	Diagnostic Specialty Slides
REF X5ES2165BAD1	Diagnostic Specialty Slides
REF X5ES242BAD1	Diagnostic Specialty Slides
REF X5ES248BAD1	Diagnostic Specialty Slides
REF X5XER201BAD1	Diagnostic Specialty Slides
REF X5XER202LCC2	Diagnostic Specialty Slides
REF X5XER202WAD1	Diagnostic Specialty Slides
REF X5XER203BAD1	Diagnostic Specialty Slides
REF X5XMZ231LCC2	Diagnostic Specialty Slides
REF 5991055	Double Cytoslide
REF 5991056	Cytoslide
REF 6776214	Superfrost Plus™ Slides
REF 9991000	Superfrost Plus™ Slides
REF 9991001	Colorfrost Plus™ Slides
REF 9991002	Colorfrost Plus™ Slides
REF 9991003	Colorfrost Plus™ Slides

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CE IVD 15 °C (59 °F) 30 °C (86 °F)

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Numărul de articol	Denumirea produsului
REF 9991004	Colorfrost Plus™ Slides
REF 9991009	Colorfrost Plus™ Slides
REF 9991011	Colorfrost Plus™ Slides
REF 9991012	Colorfrost Plus™ Slides
REF 9991013	Colorfrost Plus™ Slides
REF 9991014	Colorfrost Plus™ Slides
REF 9991015	Colorfrost Plus™ Slides
REF 6776215	Polysine™ Slides
REF 6776216	Polysine™ Slides
REF B9992010	Colormark™ Plus Slides
REF B9992010AQ	Colormark™ Plus Slides
REF B9992010BL	Colormark™ Plus Slides
REF B9992010BO	Colormark™ Plus Slides
REF B9992010GL	Colormark™ Plus Slides
REF B9992010GR	Colormark™ Plus Slides
REF B9992010LV	Colormark™ Plus Slides
REF B9992010PK	Colormark™ Plus Slides
REF B9992010PKSUNC	Colormark™ Plus Slides
REF B9992010RD	Colormark™ Plus Slides
REF B9992010TN	Colormark™ Plus Slides
REF B9992010YW	Colormark™ Plus Slides
REF TT-40418218-PS-W	SlideMate™ Plus Adhesion Microscope Slides White Tab
REF TT-50418218-PS-B	SlideMate™ Plus Adhesion Microscope Slides Blue Tab
REF TT-60418218-PS-G	SlideMate™ Plus Adhesion Microscope Slides Green Tab
REF TT-70418218-PS-P	SlideMate™ Plus Adhesion Microscope Slides Pink Tab
REF TT-80418218-PS-Y	SlideMate™ Plus Adhesion Microscope Slides Yellow Tab
REF LS-4041IPS8523-1CE	SlideMate™ Laser Plus Microscope Slides White Tab
REF LS-5041IPS8523-1CE	SlideMate™ Laser Plus Microscope Slides Blue Tab
REF LS-6041IPS8523-1CE	SlideMate™ Laser Plus Microscope Slides Green Tab
REF LS-7041IPS8523-1CE	SlideMate™ Laser Plus Microscope Slides Pink Tab
REF LS-8041IPS8523-1CE	SlideMate™ Laser Plus Microscope Slides Yellow Tab