

20d. 28



Product datasheet

Anti-Perforin antibody [5B10] ab89821

2 References 1 Image

Overview

Product name	Anti-Perforin antibody [5B10]
Description	Mouse monoclonal [5B10] to Perforin
Host species	Mouse
Specificity	This antibody is specific to a 70 kDa protein, which is a potent cytolytic pore-forming protein.
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment corresponding to an external region of the C terminal of Human perforin.
Positive control	Spleen
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.</p>

Properties

Form Liquid

20d

Ref. 6

Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: 1% BSA
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	5B10
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab89821** in the following tested applications.

Ref. 5

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/10 - 1/20.

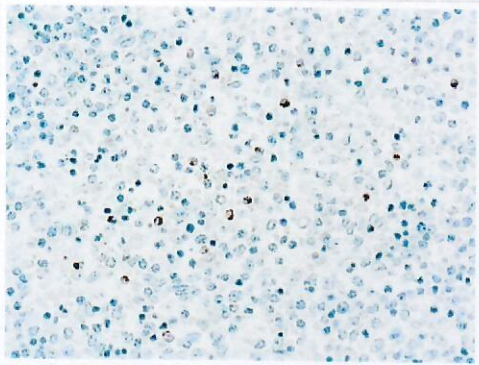
Target

Function	Plays a key role in secretory granule-dependent cell death, and in defense against virus-infected or neoplastic cells. Plays an important role in killing other cells that are recognized as non-self by the immune system, e.g. in transplant rejection or some forms of autoimmune disease. Can insert into the membrane of target cells in its calcium-bound form, oligomerize and form large pores. Promotes cytolysis and apoptosis of target cells by facilitating the uptake of cytotoxic granzymes.
Involvement in disease	Defects in PRF1 are the cause of hemophagocytic lymphohistiocytosis familial type 2 (FHL2) [MIM:603553]; also known as HPLH2. Familial hemophagocytic lymphohistiocytosis (FHL) is a genetically heterogeneous, rare autosomal recessive disorder. It is characterized by immune dysregulation with hypercytokinemia and defective natural killer cell function. The clinical features of the disease include fever, hepatosplenomegaly, cytopenia, hypertriglyceridemia, hypofibrinogenemia, and neurological abnormalities ranging from irritability and hypotonia to seizures, cranial nerve deficits, and ataxia. Hemophagocytosis is a prominent feature of the disease, and a non-malignant infiltration of macrophages and activated T lymphocytes in lymph nodes, spleen, and other organs is also found.
Sequence similarities	Belongs to the complement C6/C7/C8/C9 family. Contains 1 C2 domain. Contains 1 EGF-like domain. Contains 1 MACPF domain.
Domain	The C2 domain mediates calcium-dependent binding to lipid membranes. A subsequent conformation change leads to membrane insertion of beta-hairpin structures and pore formation. The pore is formed by transmembrane beta-strands.
Post-translational modifications	N-glycosylated.
Cellular localization	Cytoplasmic granule lumen. Secreted. Cell membrane. Endosome lumen. Stored in cytoplasmic granules of cytolytic T-lymphocytes and secreted into the cleft between T-lymphocyte and target cell. Inserts into the cell membrane of target cells and forms pores. Membrane insertion and pore

Ref. 5

formation requires a major conformation change. May be taken up via endocytosis involving clathrin-coated vesicles and accumulate in a first time in large early endosomes.

Images



Immunohistochemical analysis of human spleen labeling Perforin with ab89821 at 1:20 dilution. Secondary antibody was RTU PolyVue Plus HRP. Ref. 4

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Perforin antibody [5B10] (ab89821)

Ref. 3

Ref. 1

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