

**CE Declaration of Conformity**

We,  
**Atlas Medical GmbH**  
Head office: Ludwig-Erhard-Ring 3  
15827 Blankenfelde-Mahlow Germany  
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Email: info@atlas-site.com

Middle East Site: : Sahab Industrial Zone Area, King Abdullah II Industrial City  
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Tel.: +962 6 4026468  
Fax: +962 6 4022588  
Email: [info@atlas-medical.com](mailto:info@atlas-medical.com)

Declare our responsibility that the following product:

**Blood Grouping Reagents:**  
(Anti-A Monoclonal Reagent, Anti-B Monoclonal Reagent , Anti-AB Monoclonal Reagent and  
Anti-D IgG/IgG blend Reagent)  
see the attached list of variants

That are classified as Annex II, list A

Is produced under Atlas quality system (ISO13485: 2016) supported by GMED certificate and  
complies with the essential requirements of

**In Vitro Diagnostic Medical Devices Directive 98/79/EC**

And

EN ISO 18113-1, -2 :2011, EN ISO 15223:2016  
EN ISO 14971:2019, EN ISO 23640 :2015 , ISO 2859 :2017,  
EN 13612:2002, EN 13641:2002 , EN 13975:2003,  
EN ISO 13485:2016, EN 62366-1:2020

And

Intended for In-Vitro Professional use only.

**Conformity Assessment Route:**

Annex IV.3 –Approval full Quality Assurance System.

Annex IV.4-EC Design Examination (of the product)

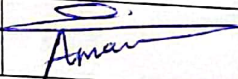
**Notified Body:**

|       |    |      |
|-------|----|------|
| G-MED | CE | 0459 |
|-------|----|------|

GMED, Laboratoire national de métrologie et d'essais  
1 rue Gaston Boissier 75015 Paris  
Tél. : 01 40 43 37 00 , TVA:FR 28 839 022 522

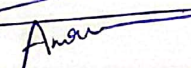
**EC Certificates No.:**

- CE Certificate of Approval full Quality Assurance System: 33540 rev4.
- CE Certificate Of EC Design Examination: 33544 rev3.

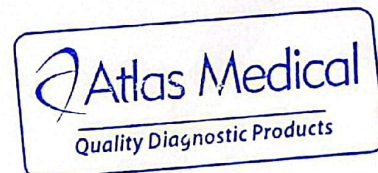
|                          |                               |                           |                                   |                                                                                       |                           |
|--------------------------|-------------------------------|---------------------------|-----------------------------------|---------------------------------------------------------------------------------------|---------------------------|
| Atlas<br>Medical<br>GmbH | Start of CE Marking           | Date of expiry            | Name & Position                   | Signature                                                                             | MRXDO10F.11<br>21.10.2013 |
|                          | 09 <sup>th</sup> october 2017 | 26 <sup>th</sup> May 2025 | Amani Al-hababbeh<br>(RA Manager) |  |                           |



| Product Code   | Product Name                                                                    | GMDN Code |
|----------------|---------------------------------------------------------------------------------|-----------|
| 8.02.00.0.0010 | Anti-A Monoclonal Reagent (Titer: 1/512), 10ml/vial, 1 vial/Carton Box          | 52532     |
| 8.02.00.1.0100 | Anti-A Monoclonal Reagent (Titer: 1/512), 10ml/vial. 10 vials / Plastic Pack    | 52532     |
| 8.02.00.1.0180 | Anti-A Monoclonal Reagent (Titer: 1/512), 10ml/vial. 18 vials / Carton Box      | 52532     |
| 8.02.01.0.0010 | Anti-B Monoclonal Reagent (Titer: 1/512), 10ml/vial, / Carton Box               | 52538     |
| 8.02.01.1.0100 | Anti-B Monoclonal Reagent (Titer: 1/512), 10ml/vial, 10 vials / Plastic Pack    | 52538     |
| 8.02.01.1.0180 | Anti-B Monoclonal Reagent (Titer: 1/512), 10ml/vial, 18 vials / Carton Box      | 52538     |
| 8.02.02.0.0010 | Anti-AB Monoclonal Reagent (Titer: 1/512), 10ml/vial, 1 vial/ Carton Box        | 46442     |
| 8.02.02.1.0100 | Anti-AB Monoclonal Reagent (Titer: 1/512), 10ml/vial, 10 vials/Plastic Pack     | 46442     |
| 8.02.02.1.0180 | Anti-AB Monoclonal Reagent (Titer: 1/512), 10ml/vial, 18 vials/Carton Box       | 46442     |
| 8.02.03.0.0010 | Anti-D IgG/IgM Blend Reagent (Titer: 1/128), 10ml/vial, 1 vial/ Carton Box      | 52647     |
| 8.02.03.1.0100 | Anti-D IgG/IgM Blend Reagent (Titer: 1/128), 10ml/vial, 10 vials / Plastic Pack | 52647     |
| 8.02.03.1.0180 | Anti-D IgG/IgM Blend Reagent (Titer: 1/128), 10ml/vial, 18 vials / Carton Box   | 52647     |
| 8.02.04.0.0010 | Anti-A Monoclonal Reagent (Titer: 1/256), 10ml/vial, 1 Vial/Carton Box          | 52532     |
| 8.02.04.0.0100 | Anti-A Monoclonal Reagent (Titer: 1/256), 10ml/vial, 10 vials / Plastic Pack    | 52532     |
| 8.02.05.0.0010 | Anti-B Monoclonal Reagent (Titer: 1/256), 10ml/vial, 1vial/Carton Box           | 52538     |
| 8.02.05.0.0100 | Anti-B Monoclonal Reagent (Titer: 1/256), 10ml/vial, 10 vials /Plastic Pack     | 52538     |
| 8.02.05.6.0030 | ABO Set (Anti-A (1/256), Anti-B (1/256), Anti-D (1/64)),3x10ml / plastic Pack   | 45308     |
| 8.02.05.7.0020 | ABO Set: Anti-A (1/256), Anti-B (1/256), 2x10ml /Plastic Pack                   | 52695     |
| 8.02.06.0.0010 | Anti-AB Monoclonal Reagent (Titer: 1/256), 10ml/vial, 1vial/Carton Box          | 46442     |
| 8.02.06.1.0100 | Anti-AB Monoclonal Reagent (Titer: 1/256), 10ml/vial,10 vials /Plastic Pack     | 46442     |
| 8.02.06.1.0180 | Anti-AB Monoclonal Reagent (Titer: 1/256), 10ml/vial,18 vials / Carton Box      | 45308     |
| 8.02.07.0.0010 | Anti-D IgG/IgM Blend Reagent (Titer: 1/64), 10ml/vial, 1Vial/ Carton Box        | 52647     |
| 8.02.07.1.0100 | Anti-D IgG/IgM Blend Reagent (Titer: 1/64), 10ml/vial, 10 vials / Plastic Pack  | 52647     |

|                           |                               |                           |                                   |                                                                                       |                                   |
|---------------------------|-------------------------------|---------------------------|-----------------------------------|---------------------------------------------------------------------------------------|-----------------------------------|
| <b>Atlas Medical GmbH</b> | <b>Start of CE Marking</b>    | <b>Date of expiry</b>     | <b>Name &amp; Position</b>        | <b>Signature</b>                                                                      | <b>MRXDO10F.11<br/>21.10.2013</b> |
|                           | 09 <sup>th</sup> october 2017 | 26 <sup>th</sup> May 2025 | Amani Al-hababbeh<br>(RA Manager) |  |                                   |

|                |                                                                                                           |       |
|----------------|-----------------------------------------------------------------------------------------------------------|-------|
| 8.02.47.0.0030 | ABO Set (Anti-A (1/512), Anti-B (1/512), Anti-D (1/128)), 3x10ml/Plastic Pack                             | 45308 |
| 8.02.47.1.0030 | ABO Set (Anti-A (1/256), Anti-B (1/256), Anti-D (1/64)), 3x10ml /Carton Box.                              | 45308 |
| 8.02.47.3.0030 | ABO Set (Anti-A (1/256), Anti-B (1/256), Anti-D (1/64)), 3x10ml /Plastic Pack                             | 45308 |
| 8.02.47.5.0030 | ABO Set (Anti-A (1/256), Anti-B (1/256), Anti-D (1/128)), 3x10ml/Plastic Pack                             | 45308 |
| 8.02.49.0.0040 | ABO Set (Anti-A (1/256), Anti-B (1/256), Anti-AB (1/256), Anti-D (1/64)), 4x10ml/Carton Box               | 45308 |
| 8.02.49.2.0040 | ABO Set (Anti-A (1/256), Anti-B (1/256), Anti-AB (1/256), Anti-D (1/128)), 4 x 10ml, 4 vials/Plastic Pack | 45308 |
| 8.02.53.0.0040 | ABO Set (Anti-A (1/512), Anti-B (1/512), Anti-AB (1/512) Anti-D (1/128)), 4x10ml/Plastic Pack             | 45308 |
| 8.02.53.1.0040 | ABO Set (Anti-A (1/512), Anti-B (1/512), Anti-AB (1/512) Anti-D (1/128)), 4x10ml, 4vials/Plastic Pack     | 45308 |
| 8.02.70.0.0010 | Anti-A monoclonal reagent , Titer (1/1024), 10 ml/vial, 1Vial/ Carton Box                                 | 52532 |
| 8.02.71.0.0010 | Anti-B Monoclonal reagent (Titer: 1/1024) , 10 ml/vial ,1Vial/ Carton Box                                 | 52538 |
| 8.02.72.0.0010 | Anti-AB Monoclonal reagent (Titer: 1/1024) , 10 ml/vial , 1Vial/ Carton Box                               | 45308 |
| 8.02.85.0.0010 | Anti-D IgG/IgM Blend Reagent , Titer 1/256, 10ml/vial, 1Vial/ Carton Box                                  | 52647 |



| Atlas Medical GmbH | Start of CE Marking           | Date of expiry            | Name & Position                | Signature                                                                             | MRXDO10F.11 |
|--------------------|-------------------------------|---------------------------|--------------------------------|---------------------------------------------------------------------------------------|-------------|
|                    | 09 <sup>th</sup> october 2017 | 26 <sup>th</sup> May 2025 | Amani Al-habahbeh (RA Manager) |  | 21.10.2013  |

**GMED certifie que le système de management de la qualité développé par**  
*GMED certifies that the quality management system developed by*

**ATLAS MEDICAL GmbH**  
**Ludwig-Erhard-Ring 3**  
**15827 Blankenfelde-Mahlow GERMANY**

**pour les activités**  
*for the activities*

**Conception et développement, fabrication et vente de dispositifs médicaux de diagnostic in vitro .**

*Design and Development, Manufacturing and Sales of in vitro diagnostic medical devices.*

**réalisées sur le(s) site(s) de**  
*performed on the location(s) of*

**Voir addendum**

*See addendum*

**est conforme aux exigences des normes internationales**  
*complies with the requirements of the international standards*

**ISO 13485: 2016**

**Début de validité / Effective date October 9th, 2020 (included)**

**Valable jusqu'au / Expiry date : October 8th, 2023 (included)**

**Etabli le / Issued on : October 8th, 2020**

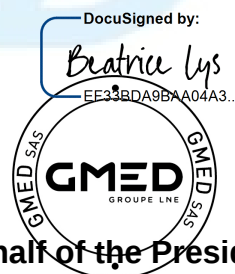


**CERTIFICATION  
DE SYSTEMES  
DE MANAGEMENT**  
Accréditation n°4-0608  
Liste des sites accrédités  
et portée disponible sur  
[www.cofrac.fr](http://www.cofrac.fr)

GMED N° 36655-1

Ce certificat est délivré selon les règles de certification GMED / This certificate is issued according to the rules of GMED certification

Renouvelle le certificat 36655-0



**On behalf of the President**  
**Béatrice LYS**  
**Technical Director**

**GMED • Société par Actions Simplifiée au capital de 300 000 € • Organisme Notifié/Notified Body n° 0459**  
**Siège social : 1, rue Gaston Boissier - 75015 Paris • Tél. : 01 40 43 37 00 • [gmed.fr](http://gmed.fr)**

**Ce certificat couvre les activités et les sites suivants :**  
*This certificate covers the following activities and sites:*

**French version :**

**Conception et développement, fabrication et vente de dispositifs médicaux de diagnostic *in vitro* à usage professionnel et/ ou d'autodiagnostic, dans les domaines du groupage sanguin, de la microbiologie, de la biochimie, de la toxicologie, de l'oncologie, de la cardiologie, de l'histologie, de l'endocrinologie et des maladies infectieuses, dans les techniques d'Agglutination/ ELISA/ Tests rapides/ Colorimétrie/ Disques antibiotiques.**

**English version:**

**Design and Development, Manufacturing and Sales of *in vitro* diagnostic medical devices for professional use and/or for self-testing, in the field of Immunohematology, Microbiology, Biochemistry, Toxicology, Oncology, Cardiology, Histology, Endocrinology Biosensors and Infectious diseases, in techniques of Agglutination/ ELISA/ Rapid tests/ Colorimetry/Antibiotic disks.**

**ATLAS MEDICAL GmbH  
Ludwig-Erhard-Ring 3  
15827 Blankenfelde-Mahlow  
GERMANY**

French version:

**Siège social, responsable de la mise sur le marché**

English version:

*Headquarter, legal manufacturer*

\*\*\*\*\*

**Sahab Industrial Zone Area  
King Abdullah II Industrial City  
Amman 11512  
JORDAN**

French version:

**Conception, fabrication et contrôle final**

English version:

*Design, manufacture and final control*

\*\*\*\*\*

**William James House  
Cowley Road,  
Cambridge, CB OWX  
United Kingdom**

French version:

**Contact réglementaire**

English version:

*Regulatory Administration*

\*\*\*\*\*

**3 sites / 3 sites**

DocuSigned by:

*Beatrice Lys*  
EF33BDA9BAA04A3...  


**On behalf of the President  
Béatrice LYS  
Technical Director**



Date: 05/Jan/2023

### **STATEMENT**

We, Atlas Medical having a registered office at Ludwig-Erhard-Ring 3, 15827 Blankenfelde-Mahlow, Berlin, Germany assign SRL Sanmedico having a registered office at A. Corobceanu Street 7A, apt.9, Chisinau MD-2012, Moldova, as authorized representative in correspondence with the conditions of directive 98/79/EEC.

We declare that the company mentioned above is authorized to register, notify, renew or modify the registration of medical devices on the territory of the Republic of Moldova.

On Behalf of Manufacturer:

General Manager

Haya Amawi

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Atlas Medical GmbH**  
Ludwig - Erhard Ring 3  
15827 Blankenfelde - Mahlow  
Tel. (0049) 33708 - 355030

**Atlas Medical:** Ludwig-Erhard-Ring 3, 15827 Blankenfelde-Mahlow, Berlin, Germany,  
Tel: +4933708355030

**Regulatory Office:** William James House, Cowley Rd, Cambridge, CB4 0WX, United Kingdom  
Tel: +44 (0) 1223 858 910

**Middle East Site:** P.O Box 204, King Abdullah II Industrial Estate, Amman, 11512, Jordan  
Tel: +962 6 4026468

## Blood Grouping Reagents:

### Anti-A Monoclonal Reagent, Anti-B Monoclonal Reagent, Anti-AB Monoclonal Reagent, Anti-D IgG/IgM blend Reagent, & Their variants

#### SLIDE AND TUBE TESTS

**IVD** For In-Vitro and professional use only

2°C  8°C  
Store at 2- 8°C

#### INTENDED USE

The blood grouping reagents are used to detect the presence or absence of A, B or Rhesus Antigens on the surface of human red blood cells based on hemagglutination using slide or tube test techniques in whole blood samples or anticoagulant blood samples collected in EDTA, citrate or heparin tubes.

#### INTRODUCTION & PRINCIPLES

Blood grouping reagents are prepared from In-Vitro culture supernatants of hybridized immunoglobulin-secreting mouse cell lines. The reagents are diluted with phosphate buffer containing sodium chloride, EDTA and bovine albumin to give reagents that are optimized for use in tube and slide procedures. **Anti-A monoclonal reagent is colored with acid blue (patent blue) dye, Anti-B monoclonal reagent is colored with acid yellow (tartrazine) dye, and Anti-AB monoclonal reagent is not colored.** The test procedure is based on hemagglutination principle, where red cells possessing the antigen agglutinate in the presence of the corresponding antibody indicating that the result is positive. The test is considered negative when no agglutination appears.

Anti-D IgG/IgM blend reagent is prepared from carefully blended human monoclonal IgM and IgG. Anti-D IgG/IgM blend reagent is suitable for slide and tube test procedures. The reagent will directly agglutinate Rh D positive cells, including majority of variants (but not D<sup>vi</sup>) and a high proportion of weak D (Du) phenotypes. The reagent will agglutinate category D<sup>vi</sup> and low grade weak D (D<sup>u</sup>) phenotypes by the indirect anti-globulin techniques.

Anti-D IgG/IgM blend reagent is diluted with a sodium chloride solution, sodium phosphate solution and bovine albumin (sodium caprylate free). Anti-D IgG/IgM blend reagent is not colored. The procedure is based on hemagglutination principle, where red cells' possessing the antigen agglutinates in the presence of the corresponding antibody in the reagent indicating that the result is positive. The test is considered negative when no agglutination appears.

#### MATERIALS

##### MATERIALS PROVIDED

##### Blood Grouping Reagents:

- Anti-A monoclonal reagent (10 ml/vial), Clone: (9113D10).
- Anti-B monoclonal reagent (10 ml/vial), Clone: (9621A8).
- Anti-AB monoclonal reagent (10ml/vial), Clone: (152D12+9113D10).
- Anti-D IgG/IgM Blend reagent (10 ml/vial), Clone: (P3X61 + P3X21223B10 + P3X290 + P3X35).

##### MATERIALS NEEDED BUT NOT PROVIDED

- Plastic test tube or glass.
- Isotonic saline solution (% 0.9) NaCl).
- Applicator sticks.
- Centrifuge (100-1200 (g) for tube test).
- Timer.
- Incubator
- Anti-Human Globulin Reagent (can be ordered from Atlas Medical).
- White or transparent glass slide.

#### PRECAUTIONS

- The reagents are intended for in vitro diagnostic use only.
- The test is for well trained professional healthy user not for lay user.
- These reagents are derived from animal and human sources, thus, appropriate care must be taken in the use and disposal of these reagents, as there are no known test methods that can guarantee absence of infectious agents.
- Do not use reagents if it is turbid or contain particles as this may indicate reagent deterioration or contamination.
- Protective clothing should be worn when handling the reagents.
- **The reagents contain (0.1-0.2%) Sodium Azide and 0.02% sodium arseniate which is toxic and can be absorbed through the skin. When drained, the drains should be thoroughly flushed with water.**
- The reagents should be used as supplied and in accordance to the procedure mentioned below. Don't use beyond expiration date.
- Avoid cross contamination of reagents or specimens.
- Visible signs of microbial growth in any reagent may indicate degradation and the use of such reagent should be discontinued.

- Don't use these reagents if the label is not available or damaged.
- Do not use dark glass slide.
- Don't use the kit if damaged or the glass vials are broken or leaking and discard the contents immediately.
- Test materials and samples should be discarded properly in a biohazard container.
- Wash hands and the test table top with water and soap once the testing is done.
- Hemolysed blood sample should not be used for testing.
- The test should be performed at room temperature in a well lit area with very good visibility.
- Failure to follow the procedure in this package insert may give false results or safety hazard.
- Close the vial tightly after each test.
- The reagent is considered toxic, so don't drink or eat beside it.
- If spillage of reagent occurs clean with disinfectant (disinfectant used could be irritable so handle with care).

#### STORAGE CONDITIONS

- The reagents should be stored refrigerated between 2 - 8°C.
- Never Freeze or expose to elevated temperature.
- The reagent is stable until the expiry date stated on the product label. Do not use the reagents past the expiry date.

#### REAGENT PREPARATION

- The reagents are intended for use as supplied, no prior preparation or dilution of the reagent is required.
- All reagents should be brought to room temperature before use.

#### SPECIMEN COLLECTION AND PREPARATION

- Blood collected with or without anticoagulant (EDTA, Heparin or Citrate) can be used for Antigen typing.

**Note:** Blood collected without anticoagulant should be tested immediately.

- The specimens should be tested as soon as possible after collection. If testing is delayed, the specimens should be stored at 2- 8 °C. Sample must be retained to room temperature prior to analysis. (Testing should be carried out within five days of collections).
- Insure that there is no sign of hemolysis.
- At the time of the test, centrifuge the blood sample at 1200 RCF for 3 minutes.
- Blood collection is to be done with great care.

#### PROCEDURES

##### A. DIRECT TUBE METHOD AT ROOM TEMPERATURE

1. Prepare a 5% suspension of red blood cells in isotonic solution.
2. Using the vial dropper, transfer a drop (40±10µl) of each reagent into a separate and appropriately marked tube.
3. Add 50 µl of red blood cell suspension prepared in step 1.
4. Shake to homogenize the mixture, then centrifuge at 500g for **1 minute**.
5. Gently shake the tube in such a way to detach the cell pellet and macroscopically observe for any possible agglutination.
6. Read the reaction immediately.
7. For Anti-D tube, if the reaction is weak or negative, shake the tubes and incubate at 37°C for **15 minutes**.
8. Wash the red blood cells twice with isotonic saline solution (NaCl 0.9%) and discard the last washing liquid.
9. Add one drop (50µl) of the AHG reagent into the tube. Mix and centrifuge at 120g for **1 minute**.
10. Gently shake the tube in such a way to detach the cell pellet and macroscopically observe for any possible agglutination.
11. Read the reaction immediately.

##### B. ANTIGLOBULIN INDIRECT METHOD for ANTI-D

1. After immediately centrifuging and reading as above, if the reaction is weak or negative, shake the tubes and incubate at 37°C for 15 minutes.
2. Wash the red blood cells twice with isotonic saline solution (NaCl 0.9%) and discard the last washing liquid.
3. Add one drop (40 µl ± 10 µl) of ANTI-HUMAN GLOBULIN to the tube. Mix and centrifuge at 120 (g) for **1 minute**.
4. Gently shake the tube in such a way to detach the cell pellet and macroscopically observe for any possible agglutination.
5. Read the reaction immediately.

##### C. DIRECT SLIDE METHOD AT ROOM TEMPERATURE

1. Bring reagents and samples to room temperature (18-25°C).
2. Using the wax pen divide the slide into appropriate numbers of divisions.
3. Using the provided dropper, place one drop (40 µl ± 10 µl) of each reagent onto its correspondent division on the slide.
4. Add 25µl of the precipitated cells next to each drop of reagents.
5. Mix the reagent and the cells using a clean stirring stick over an area with a diameter of approximately 20-40mm.
6. Incubate the slide at room temperature (18-25°C) without stirring for **30 seconds**.
7. Hold the slide and gently rock the slide for **3 minutes** and observe macroscopically for any agglutination.
8. Read the reaction immediately.

**READING THE RESULT**  
**POSITIVE:** If Agglutination appears.  
**NEGATIVE:** If no agglutination is observed.  
Use the below table to determine the blood group:

| Result of each reaction   |                           |                            |                              | ABO Group |
|---------------------------|---------------------------|----------------------------|------------------------------|-----------|
| Anti-A monoclonal reagent | Anti-B monoclonal reagent | Anti-AB monoclonal reagent | Anti-D IgG/IgM blend reagent |           |
| +                         | -                         | +                          | +                            | A+        |
| +                         | -                         | +                          | -                            | A-        |
| -                         | +                         | +                          | +                            | B+        |
| -                         | +                         | +                          | -                            | B-        |
| +                         | +                         | +                          | +                            | AB+       |
| +                         | +                         | +                          | -                            | AB-       |
| -                         | -                         | -                          | +                            | O+        |
| -                         | -                         | -                          | -                            | O-        |

- STABILITY OF THE REACTIONS**
- ABO Blood Grouping Tube tests should be read immediately following centrifugation.
  - Slide tests should be interpreted within three minutes to avoid the possibility that a negative result may be incorrectly interpreted as positive due to drying of reagents.
  - Delay in reading and interpreting results may result in weekly positive or falsely negative reactions. Slide tests should be interpreted at the end of the three minutes.

- PROCEDURE LIMITATION**
1. False positive/ negative results may occur due to:
    - Contamination from test materials.
    - Improper storage, cells concentration, incubation time or temperature.
    - Improper or excessive centrifugation.
    - Deviation from the recommended technique.
    - Blood samples of weak A or B subgroups may give rise to false negative results or weak reactions when tested using slide test method. It is advisable to re-test weak subgroups using tube test method.
  2. Weaker reactions may be observed with stored blood than with fresh blood.
  3. ABO antigens are not fully developed at birth, weaker reactions may therefore occur with cord or neonatal red cells.
  4. ABO blood grouping interpretation on individuals greater than 6 months old should be confirmed by testing serum or plasma of the individual against group A and group B red cells (reverse grouping). If the results obtained with the serum do not correlate with the red cell test, further investigation is required.
  5. Return the kit to the agent if it does not function properly.
  6. Anti-D IgG/IgM blend Reagent tests conducted on particular weak-D phenotypes, while satisfactory, cannot ensure recognition of all weak variants, due to the variability of antigen patterns.

**DIAGNOSTIC PERFORMANCE CHARACTERISTICS**  
The following tables compare the results in slide and tube techniques of 3 lots of Atlas Medical reagents and the results of a CE marked device.

| Slide Technique                                                                                                     |       |       |       |            |
|---------------------------------------------------------------------------------------------------------------------|-------|-------|-------|------------|
| Group A                                                                                                             |       |       |       |            |
| Positive with anti-A monoclonal reagent and anti-AB monoclonal reagent<br>Negative with anti-B and Negative control |       |       |       |            |
| CE marked device                                                                                                    | Lot A | Lot B | Lot C | Compliance |
| 232                                                                                                                 | 232   | 232   | 232   | 100%       |
| Tube Technique                                                                                                      |       |       |       |            |
| Group A                                                                                                             |       |       |       |            |
| Positive with anti-A monoclonal reagent and anti-AB monoclonal reagent<br>Negative with anti-B and Negative control |       |       |       |            |
| CE marked device                                                                                                    | Lot A | Lot B | Lot C | Compliance |
| 212                                                                                                                 | 212   | 212   | 212   | 100%       |

| Slide Technique                                                                                                     |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Group B                                                                                                             |  |  |  |  |
| Positive with anti-B monoclonal reagent and anti-AB monoclonal reagent<br>Negative with anti-A and Negative control |  |  |  |  |

| CE marked device                                                                                                    | Lot A | Lot B | Lot C | Compliance |
|---------------------------------------------------------------------------------------------------------------------|-------|-------|-------|------------|
| 61                                                                                                                  | 61    | 61    | 61    | 100%       |
| Tube Technique                                                                                                      |       |       |       |            |
| Group B                                                                                                             |       |       |       |            |
| Positive with anti-B monoclonal reagent and anti-AB monoclonal reagent<br>Negative with anti-A and Negative control |       |       |       |            |
| CE marked device                                                                                                    | Lot A | Lot B | Lot C | Compliance |
| 61                                                                                                                  | 61    | 61    | 61    | 100%       |

| Slide Technique                                                                                                                     |       |       |       |            |
|-------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|------------|
| Group O                                                                                                                             |       |       |       |            |
| Negative with anti-A monoclonal reagent, Anti-B monoclonal reagent and anti-AB monoclonal reagent<br>Negative with Negative control |       |       |       |            |
| CE marked device                                                                                                                    | Lot A | Lot B | Lot C | Compliance |
| 241                                                                                                                                 | 241   | 241   | 241   | 100%       |
| Tube Technique                                                                                                                      |       |       |       |            |
| Group O                                                                                                                             |       |       |       |            |
| Negative with anti-A monoclonal reagent, Anti-B monoclonal reagent and anti-AB monoclonal reagent<br>Negative with Negative control |       |       |       |            |
| CE marked device                                                                                                                    | Lot A | Lot B | Lot C | Compliance |
| 243                                                                                                                                 | 243   | 243   | 243   | 100%       |

| Slide Technique                                                                                                                     |       |       |       |            |
|-------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|------------|
| Group AB                                                                                                                            |       |       |       |            |
| Positive with anti-A monoclonal reagent, Anti-B monoclonal reagent and anti-AB monoclonal reagent<br>Negative with Negative control |       |       |       |            |
| CE marked device                                                                                                                    | Lot A | Lot B | Lot C | Compliance |
| 33                                                                                                                                  | 33    | 33    | 33    | 100%       |
| Tube Technique                                                                                                                      |       |       |       |            |
| Group AB                                                                                                                            |       |       |       |            |
| Positive with anti-A monoclonal reagent, Anti-B monoclonal reagent and anti-AB monoclonal reagent<br>Negative with Negative control |       |       |       |            |
| CE marked device                                                                                                                    | Lot A | Lot B | Lot C | Compliance |
| 24                                                                                                                                  | 24    | 24    | 24    | 100%       |

No inversion in diagnosis has been shown: from a qualitative point of view we have observed 100% compliance in direct group testing in slide and tube techniques for determination of A, B, AB and O groups for the three lots of Atlas Medical.

**QUALITY CONTROL**  
The reactivity of all blood grouping reagents should be confirmed by testing known positive and negative red blood cells on each day of use. To confirm the specificity and sensitivity, Blood grouping reagents should be tested with antigen-positive and antigen-negative red blood cells.

**REFERENCES**

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3. Kholer G., Milstein C. Continuous culture of fused cells secreting antibody of predefined specificity, 256, 495-497, 1975
4. Messeter L. et. al. Mouse monoclonal antibodies with anti-A, anti-B and anti-A,B specificities, some superior to human polyclonal ABO reagents, Vox Sang 46, 185-194, 1984
5. Race R.R. and Sanger R. Blood groups in man, 6th ed., Oxford: Blackwell Scientific, 1975.
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PPI861A01

Rev.L (19.02.2022)



LIST OF VARIANTS:

| Product Code   | Product Name                                                                                                  |
|----------------|---------------------------------------------------------------------------------------------------------------|
| 8.02.00.0.0010 | Anti-A Monoclonal Reagent (Titer: 1 /512), 10ml/vial, 1 vial/Carton Box                                       |
| 8.02.00.1.0100 | Anti-A Monoclonal Reagent (Titer: 1 /512), 10ml/vial. 10 vials / Plastic Pack                                 |
| 8.02.00.1.0180 | Anti-A Monoclonal Reagent (Titer: 1 /512), 10ml/vial. 18 vials / Carton Box                                   |
| 8.02.01.0.0010 | Anti-B Monoclonal Reagent (Titer: 1 /512), 10ml/vial, / Carton Box                                            |
| 8.02.01.1.0100 | Anti-B Monoclonal Reagent (Titer: 1 /512), 10ml/vial, 10 vials / Plastic Pack                                 |
| 8.02.01.1.0180 | Anti-B Monoclonal Reagent (Titer: 1 /512), 10ml/vial, 18 vials / Carton Box                                   |
| 8.02.02.0.0010 | Anti-AB Monoclonal Reagent (Titer: 1 /512), 10ml/vial, 1 vial/ Carton Box                                     |
| 8.02.02.1.0100 | Anti-AB Monoclonal Reagent (Titer: 1 /512), 10ml/vial, 10 vials/Plastic Pack                                  |
| 8.02.02.1.0180 | Anti-AB Monoclonal Reagent (Titer: 1 /512), 10ml/vial, 18 vials/Carton Box                                    |
| 8.02.03.0.0010 | Anti-D IgG/IgM Blend Reagent (Titer: 1 /128), 10ml/vial, 1 vial/ Carton Box                                   |
| 8.02.03.1.0100 | Anti-D IgG/IgM Blend Reagent (Titer: 1 /128), 10ml/vial, 10 vials / Plastic Pack                              |
| 8.02.03.1.0180 | Anti-D IgG/IgM Blend Reagent (Titer: 1 /128), 10ml/vial, 18 vials / Carton Box                                |
| 8.02.04.0.0010 | Anti-A Monoclonal Reagent (Titer: 1 /256), 10ml/vial, 1 Vial/Carton Box                                       |
| 8.02.04.0.0100 | Anti-A Monoclonal Reagent (Titer: 1 /256), 10ml/vial, 10 vials / Plastic Pack                                 |
| 8.02.05.0.0010 | Anti-B Monoclonal Reagent (Titer: 1 /256), 10ml/vial, 1vial/Carton Box                                        |
| 8.02.05.0.0100 | Anti-B Monoclonal Reagent (Titer: 1 /256), 10ml/vial, 10 vials /Plastic Pack                                  |
| 8.02.05.6.0030 | ABO Set (Anti-A (1/256), Anti-B (1 /256), Anti-D (1/64)),3x10ml / plastic Pack                                |
| 8.02.05.7.0020 | ABO Set: Anti-A (1/256), Anti-B (1 /256), 2x10ml /Plastic Pack                                                |
| 8.02.06.0.0010 | Anti-AB Monoclonal Reagent (Titer: 1 /256), 10ml/vial, 1vial/Carton Box                                       |
| 8.02.06.1.0100 | Anti-AB Monoclonal Reagent (Titer: 1 /256), 10ml/vial,10 vials /Plastic Pack                                  |
| 8.02.06.1.0180 | Anti-AB Monoclonal Reagent (Titer: 1 /256), 10ml/vial,18 vials / Carton Box                                   |
| 8.02.07.0.0010 | Anti-D IgG/IgM Blend Reagent (Titer: 1 /64), 10ml/vial, 1Vial/ Carton Box                                     |
| 8.02.07.1.0100 | Anti-D IgG/IgM Blend Reagent (Titer: 1 /64), 10ml/vial, 10 vials / Plastic Pack                               |
| 8.02.47.0.0030 | ABO Set (Anti-A (1 /512), Anti-B (1 /512), Anti-D (1 /128)),3x10ml/Plastic Pack                               |
| 8.02.47.1.0030 | ABO Set (Anti-A (1 /256), Anti-B (1 /256), Anti-D (1 /64)), 3x10ml /Carton Box.                               |
| 8.02.47.3.0030 | ABO Set (Anti-A (1 /256), Anti-B (1 /256), Anti-D (1 /64)), 3x10ml /Plastic Pack                              |
| 8.02.47.5.0030 | ABO Set (Anti-A (1 /256), Anti-B (1 /256), Anti-D (1 /128)), 3x10ml/Plastic Pack                              |
| 8.02.49.0.0040 | ABO Set (Anti-A (1 /256), Anti-B (1 /256), Anti-AB (1 /256), Anti-D (1 /64)), 4x10ml/Carton Box               |
| 8.02.49.2.0040 | ABO Set (Anti-A (1 /256), Anti-B (1 /256), Anti-AB (1 /256), Anti-D (1 /128)), 4 x 10ml, 4 vials/Plastic Pack |
| 8.02.53.0.0040 | ABO Set (Anti-A (1 /512), Anti-B (1 /512), Anti-AB (1 /512) Anti-D (1 /128)), 4x10ml/Plastic Pack             |
| 8.02.53.1.0040 | ABO Set (Anti-A (1 /512), Anti-B (1 /512), Anti-AB (1 /512) Anti-D (1 /128)), 4x10ml, 4vials/Plastic Pack     |
| 8.02.70.0.0010 | Anti-A monoclonal reagent , Titer (1/1024), 10 ml/vial, 1Vial/ Carton Box                                     |
| 8.02.71.0.0010 | Anti-B Monoclonal reagent (Titer: 1 /1024) , 10 ml/vial ,1Vial/ Carton Box                                    |
| 8.02.72.0.0010 | Anti-AB Monoclonal reagent (Titer: 1 /1024) , 10 ml/vial , 1Vial/ Carton Box                                  |
| 8.02.85.0.0010 | Anti-D IgG/IgM Blend reagent ( Titer 1 /256), 10ml/vial, 1Vial/ Carton Box                                    |

|                                                                                    |                                                     |                                                                                     |                                    |
|------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------|
|  | Catalogue Number                                    |  | Temperature limit                  |
|  | In Vitro diagnostic medical device                  |  | Caution                            |
|  | Contains sufficient for <n> tests and Relative size |  | Consult instructions for use (IFU) |
|  | Batch code                                          |  | Manufacturer                       |
|  | Fragile, handle with care                           |  | Use-by date                        |
|  | Manufacturer fax number                             |  | Do not use if package is damaged   |
|  | Manufacturer telephone number                       |  | Date of Manufacture                |
|  | Keep away from sunlight                             |  | Keep dry                           |

## Certificate of CE-Notification

This is to certify that, in accordance with the *In Vitro* Diagnostic Medical Device Directive 98/79/EC, **CEpartner4U BV** agrees to perform all duties and responsibilities as the Authorized Representative for

**Monocent Inc.**  
**9237 Eton Ave.,**  
**Chatsworth, CA 91311**  
**United States**

as stipulated and demanded by the aforementioned Directive. The Dutch Competent Authorities have accepted the manufacturer's medical device registrations by CEpartner4U as listed on the product list attached to the manufacturer's Declaration of Conformity:

**IVD devices were registered with the Dutch Competent Authority with registration number:**

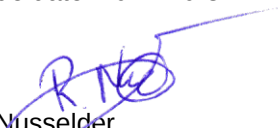
| IVD Devices groups: | Registration number: |
|---------------------|----------------------|
| CLIA Test Kits      | NL-CA002-2020-50897  |
| ELISA Test Kits     | NL-CA002-2020-50898  |
| IFA Test Kits       | NL-CA002-2020-50899  |
| Instruments         | NL-CA002-2020-50900  |
| PCR Test Kits       | NL-CA002-2020-50901  |
| Rapid Tests         | NL-CA002-2020-50902  |
| Serology Test Kits  | NL-CA002-2020-50903  |

*see appendix*

The manufacturer has provided CEpartner4U with all necessary documentation, together with an appropriate Declaration of Conformity that the IVD medical devices fulfil the essential requirements of Directive 98/79/EC.

Issue date: 2022-10-31

This Certificate of CE-Notification is valid until May 26, 2025

  
R. Nusselder  
Sr. consultant CEpartner4U BV

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## Appendix

List of devices.

| CLIA Device Group           | Ref. No. | IVDD<br>Risk class | IVDR<br>Risk class | GMDN<br>code | First<br>CE-marking |
|-----------------------------|----------|--------------------|--------------------|--------------|---------------------|
| <b>Allergy Assays</b>       |          |                    |                    |              |                     |
| IgE                         | CL3-5055 | Low Risk           | C                  | 30275        | 2020-04-14          |
| <b>Thyroid Assays</b>       |          |                    |                    |              |                     |
| T3                          | CL3-5028 | Low Risk           | C                  | 30312        | 2020-04-14          |
| T4                          | CL3-5029 | Low Risk           | C                  | 30314        | 2020-04-14          |
| TSH                         | CL2-5030 | Low Risk           | C                  | 30318        | 2020-04-14          |
| T3 Uptake                   | CL3-5072 | Low Risk           | C                  | 30313        | 2020-04-14          |
| FT3                         | CL3-5026 | Low Risk           | C                  | 30309        | 2020-04-14          |
| FT4                         | CL3-5027 | Low Risk           | C                  | 30308        | 2020-04-14          |
| Tg (Thyroglobulin)          | CL3-5073 | Low Risk           | C                  | 30490        | 2020-04-14          |
| TBG                         | CL3-5074 | Low Risk           | C                  | 30316        | 2020-04-14          |
| Anti-Tg                     | CL3-5075 | Low Risk           | C                  | 30490        | 2020-04-14          |
| Anti-TPO                    | CL3-5076 | Low Risk           | C                  | 30317        | 2020-04-14          |
| Ultra-Sensitive TSH         | CL2-5077 | Low Risk           | C                  | 30318        | 2020-04-14          |
| <b>Fertility Assays</b>     |          |                    |                    |              |                     |
| LH                          | CL3-5006 | Low Risk           | C                  | 38965        | 2020-04-14          |
| FSH                         | CL3-5004 | Low Risk           | C                  | 30322        | 2020-04-14          |
| Prolactin                   | CL3-5008 | Low Risk           | C                  | 30325        | 2020-04-14          |
| hCG                         | CL2-5005 | Low Risk           | B                  | 30513        | 2020-04-14          |
| AMH                         | CL3-5069 | Low Risk           | C                  | 43148        | 2020-04-14          |
| Beta hCG                    | CL2-5055 | Low Risk           | B                  | 30332        | 2020-04-14          |
| HGH                         | CL3-5007 | Low Risk           | C                  | 30333        | 2020-04-14          |
| PAPP-A                      | CL3-5068 | Low Risk           | C                  | 31533        | 2020-04-14          |
| <b>Diabetes Assays</b>      |          |                    |                    |              |                     |
| Insulin                     | CL2-5003 | Low Risk           | C                  | 30338        | 2020-04-14          |
| C-peptide                   | CL2-5002 | Low Risk           | C                  | 30336        | 2020-04-14          |
| <b>Tumor Markers Assays</b> |          |                    |                    |              |                     |
| AFP                         | CL3-5031 | Low Risk           | C                  | 30295        | 2020-04-14          |
| CEA                         | CL3-5036 | Low Risk           | C                  | 30288        | 2020-04-14          |
| Free Beta hCG               | CL2-5037 | Low Risk           | C                  | 30333        | 2020-04-14          |
| Beta 2 Microglobulin        | CL2-5032 | Low Risk           | C                  | 30296        | 2020-04-14          |
| NSE                         | CL2-5039 | Low Risk           | C                  | 30301        | 2020-04-14          |
| CA-12-5                     | CL3-5034 | Low Risk           | C                  | 30283        | 2020-04-14          |
| CA-19-9                     | CL2-5035 | Low Risk           | C                  | 30280        | 2020-04-14          |
| CA-15-3                     | CL2-5033 | Low Risk           | C                  | 30279        | 2020-04-14          |
| Ferritin                    | CL3-5001 | Low Risk           | C                  | 30377        | 2020-04-14          |
| Cyfra21-1                   | CL2-5079 | Low Risk           | C                  | 44431        | 2020-04-14          |
| Pro-GRP                     | CL2-5080 | Low Risk           | C                  | 44438        | 2020-04-14          |
| PAP                         | CL2-5081 | Low Risk           | C                  | 34226        | 2020-04-14          |
| <b>Steroid Assays</b>       |          |                    |                    |              |                     |
| Progesterone                | CL3-5021 | Low Risk           | C                  | 30294        | 2020-04-14          |
| Estradiol                   | CL3-5016 | Low Risk           | C                  | 30321        | 2020-04-14          |
| Testosterone                | CL3-5022 | Low Risk           | C                  | 30327        | 2020-04-14          |

| CLIA Device Group                                   | Ref. No. | IVDD<br>Risk class | IVDR<br>Risk class | GMDN<br>code | First<br>CE-marking |
|-----------------------------------------------------|----------|--------------------|--------------------|--------------|---------------------|
| Free Testosterone                                   | CL9-5023 | Low Risk           | C                  | 30327        | 2020-04-14          |
| Testosterone (Saliva)                               | CL9-5025 | Low Risk           | C                  | 30327        | 2020-04-14          |
| 5a-Androstane-3a, 17b-diol Glucuronide (3a- Diol G) | CL9-5009 | Low Risk           | C                  | 31533        | 2020-04-14          |
| 17 OH Progesterone                                  | CL3-5010 | Low Risk           | C                  | 30324        | 2020-04-14          |
| Androstenedione                                     | CL3-5070 | Low Risk           | C                  | 30319        | 2020-04-14          |
| Aldosterone                                         | CL3-5011 | Low Risk           | C                  | 31428        | 2020-04-14          |
| Cortisol                                            | CL3-5012 | Low Risk           | C                  | 31394        | 2020-04-14          |
| DHEA                                                | CL3-5013 | Low Risk           | C                  | 39894        | 2020-04-14          |
| DHEA-S                                              | CL3-5014 | Low Risk           | C                  | 39894        | 2020-04-14          |
| uE3                                                 | CL3-5041 | Low Risk           | C                  | 30330        | 2020-04-14          |
| Estriol (Saliva)                                    | CL9-5018 | Low Risk           | C                  | 30329        | 2020-04-14          |
| Estrone (Saliva)                                    | CL9-5019 | Low Risk           | C                  | 33293        | 2020-04-14          |
| Estrone                                             | CL3-5020 | Low Risk           | C                  | 33293        | 2020-04-14          |
| Plasma Renin Activity (PRA)                         | CL9-5024 | Low Risk           | C                  | 43444        | 2020-04-14          |
| SHBG                                                | CL3-5071 | Low Risk           | C                  | 30326        | 2020-04-14          |
| Procalcitonin                                       | CL3-5067 | Low Risk           | C                  | 12069016     | 2020-04-14          |
| <b>Infectious Disease Assays</b>                    |          |                    |                    |              |                     |
| Digoxin                                             | CL3-5059 | Low Risk           | C                  | 30386        | 2020-04-14          |
| hs-CRP                                              | CL2-5060 | Low Risk           | C                  | 30499        | 2020-04-14          |
| CK-MB                                               | CL3-5061 | Low Risk           | C                  | 30499        | 2020-04-14          |
| Myoglobin                                           | CL3-5062 | Low Risk           | C                  | 30264        | 2020-04-14          |
| cTn I                                               | CL2-5063 | Low Risk           | C                  | 30266        | 2020-04-14          |
| <b>Bone Metabolism</b>                              |          |                    |                    |              |                     |
| ACTH                                                | CL3-5017 | Low Risk           | C                  | 39005        | 2020-04-14          |
| Calcitonin                                          | CL3-5064 | Low Risk           | C                  | 30342        | 2020-04-14          |
| PTH                                                 | CL3-5065 | Low Risk           | C                  | 30353        | 2020-04-14          |
| Vitamin D                                           | CL3-5066 | Low Risk           | C                  | 30350        | 2020-04-14          |
| <b>Autoimmune Disease</b>                           |          |                    |                    |              |                     |
| Cardiolipin IgA                                     | CL2-5051 | Low Risk           | C                  | 30475        | 2020-04-14          |
| Cardiolipin IgG                                     | CL2-5052 | Low Risk           | C                  | 30475        | 2020-04-14          |
| Cardiolipin IgM                                     | CL2-5053 | Low Risk           | C                  | 30475        | 2020-04-14          |
| ds-DNA                                              | CL2-5054 | Low Risk           | C                  | 30458        | 2020-04-14          |
| RF IgM                                              | CL2-5114 | Low Risk           | C                  | 30500        | 2020-04-14          |
| B2GP1 IgA                                           | CL2-5115 | Low Risk           | C                  | 30478        | 2020-04-14          |
| B2GP1 IgG                                           | CL2-5116 | Low Risk           | C                  | 30478        | 2020-04-14          |
| B2GP1 IgM                                           | CL2-5117 | Low Risk           | C                  | 30478        | 2020-04-14          |
| Thyroglobulin IgG                                   | CL2-5118 | Low Risk           | C                  | 30315        | 2020-04-14          |
| Anti-CCP                                            | CL2-5119 | Low Risk           | C                  | 44202        | 2020-04-14          |
| <b>Anemia Assays</b>                                |          |                    |                    |              |                     |
| Folate                                              | CL3-5056 | Low Risk           | C                  | 30378        | 2020-04-14          |
| Vitamin B12                                         | CL3-5057 | Low Risk           | C                  | 30384        | 2020-04-14          |
| Transferrin Soluble Receptor (sTfR)                 | CL3-5058 | Low Risk           | C                  | 30253        | 2020-04-14          |
| <b>NeoNatal Assays</b>                              |          |                    |                    |              |                     |
| Neonatal TSH                                        | CL2-5078 | Low Risk           | C                  | 30310        | 2020-04-14          |

| CLIA Device Group                | Ref. No. | IVDD<br>Risk class | IVDR<br>Risk class | GMDN<br>code | First<br>CE-marking |
|----------------------------------|----------|--------------------|--------------------|--------------|---------------------|
| <b>Infectious Disease Assays</b> |          |                    |                    |              |                     |
| H. pylori IgA                    | CL2-5048 | Low Risk           | B                  | 30691        | 2020-04-14          |
| H. pylori IgG                    | CL2-5049 | Low Risk           | B                  | 30691        | 2020-04-14          |
| H. pylori IgM                    | CL2-5050 | Low Risk           | B                  | 30691        | 2020-04-14          |
| H. pylori IgG (Quantitative)     | CL2-5082 | Low Risk           | B                  | 30691        | 2020-04-14          |
| H. pylori Antigen                | CL2-5083 | Low Risk           | B                  | 30691        | 2020-04-14          |
| EBV VCA IgA                      | CL2-5084 | Low Risk           | D                  | 30809        | 2020-04-14          |
| EBV VCA IgG                      | CL2-5085 | Low Risk           | D                  | 30809        | 2020-04-14          |
| EBV VCA IgM                      | CL2-5086 | Low Risk           | D                  | 30809        | 2020-04-14          |
| EBV EA-D IgA                     | CL2-5087 | Low Risk           | D                  | 30809        | 2020-04-14          |
| EBV EA-D IgG                     | CL2-5088 | Low Risk           | D                  | 30809        | 2020-04-14          |
| EBV EA-D IgM                     | CL2-5089 | Low Risk           | D                  | 30809        | 2020-04-14          |
| EBNA IgA                         | CL2-5090 | Low Risk           | D                  | 30808        | 2020-04-14          |
| EBNA IgG                         | CL2-5091 | Low Risk           | D                  | 30808        | 2020-04-14          |
| EBNA IgM                         | CL2-5092 | Low Risk           | D                  | 30808        | 2020-04-14          |
| Measles IgG                      | CL2-5093 | Low Risk           | C                  | 44019        | 2020-04-14          |
| Measles IgM                      | CL2-5094 | Low Risk           | C                  | 44019        | 2020-04-14          |
| VZV IgG                          | CL2-5095 | Low Risk           | C                  | 44027        | 2020-04-14          |
| VZV IgM                          | CL2-5096 | Low Risk           | C                  | 44027        | 2020-04-14          |
| Mumps IgG                        | CL2-5097 | Low Risk           | C                  | 33908        | 2020-04-14          |
| Mumps IgM                        | CL2-5098 | Low Risk           | C                  | 33908        | 2020-04-14          |
| Dengue IgG                       | CL2-5099 | Low Risk           | C                  | 32481        | 2020-04-14          |
| Dengue IgM                       | CL2-5100 | Low Risk           | C                  | 32481        | 2020-04-14          |
| HSV 1/2 IgG                      | CL2-5101 | Low Risk           | C                  | 40176        | 2020-04-14          |
| HSV 1/2 IgM                      | CL2-5102 | Low Risk           | C                  | 40176        | 2020-04-14          |
| HSV 1 IgA                        | CL2-5103 | Low Risk           | C                  | 38870        | 2020-04-14          |
| HSV 1 IgG                        | CL2-5104 | Low Risk           | C                  | 38870        | 2020-04-14          |
| HSV 1 IgM                        | CL2-5105 | Low Risk           | C                  | 38870        | 2020-04-14          |
| HSV 2 IgA                        | CL2-5106 | Low Risk           | C                  | 38875        | 2020-04-14          |
| HSV 2 IgG                        | CL2-5107 | Low Risk           | C                  | 38875        | 2020-04-14          |
| HSV 2 IgM                        | CL2-5108 | Low Risk           | C                  | 38875        | 2020-04-14          |

| ELISA Device Group                | Ref. No.              | IVDD Risk<br>class | IVDR Risk<br>class | GMDN<br>code | First<br>CE-marking |
|-----------------------------------|-----------------------|--------------------|--------------------|--------------|---------------------|
| <b>Allergy</b>                    |                       |                    |                    |              |                     |
| Total Human IgE                   | EL1-1000,<br>EL2-1000 | Low Risk           | B                  | 30275        | 2020-04-14          |
| Human Specific IgG                | EL15-1001             | Low Risk           | C                  | 44211        | 2020-04-14          |
| Human Specific IgG4               | EL15-1002             | Low Risk           | C                  | 44211        | 2020-04-14          |
| Histamine                         | EL30-1003             | Low Risk           | C                  | 30274        | 2020-04-14          |
| <b>Anemia</b>                     |                       |                    |                    |              |                     |
| Vitamin B12                       | EL1-1007              | Low Risk           | B                  | 30384        | 2020-04-14          |
| Folate                            | EL1-1005              | Low Risk           | B                  | 30378        | 2020-04-14          |
| sTfR-Transferrin Soluble Receptor | EL3-1006              | Low Risk           | B                  | 30253        | 2020-04-14          |
| Ferritin                          | EL1-1004              | Low Risk           | B                  | 30377        | 2020-04-14          |

| ELISA Device Group               | Ref. No.  | IVDD Risk class | IVDR Risk class | GMDN code | First CE-marking |
|----------------------------------|-----------|-----------------|-----------------|-----------|------------------|
| Hepcidin                         | EL1-1008  | Low Risk        | B               | 12070190  | 2020-04-14       |
| <b>Autoimmune Disease</b>        |           |                 |                 |           |                  |
| Anti-CCP                         | EL2-1011  | Low Risk        | B               | 44202     | 2020-04-14       |
| Anti-CP IgG                      | EL20-1288 | Low Risk        | B               | 44202     | 2020-04-14       |
| Beta 2 Glycoprotein 1 IgA        | EL2-1017  | Low Risk        | B               | 30478     | 2020-04-14       |
| Beta 2 Glycoprotein 1 IgG        | EL2-1018  | Low Risk        | B               | 30478     | 2020-04-14       |
| Beta 2 Glycoprotein 1 IgM        | EL2-1019  | Low Risk        | B               | 30478     | 2020-04-14       |
| Anti-Tissue Transglutaminase IgG | EL20-1015 | Low Risk        | C               | 44385     | 2020-04-14       |
| Anti-Tissue Transglutaminase IgA | EL20-1014 | Low Risk        | C               | 44385     | 2020-04-14       |
| ANA Screen IgG                   | EL1-1009  | Low Risk        | B               | 30454     | 2020-04-14       |
| ENA IgG Profile-6                | EL10-1024 | Low Risk        | B               | 30455     | 2020-04-14       |
| ENA Screen IgG                   | EL20-1025 | Low Risk        | B               | 30455     | 2020-04-14       |
| Rheumatoid Factor (RF) IgA       | EL15-1034 | Low Risk        | B               | 30500     | 2020-04-14       |
| Rheumatoid Factor (RF) IgG       | EL15-1035 | Low Risk        | B               | 30500     | 2020-04-14       |
| Rheumatoid Factor (RF) IgM       | EL2-1038  | Low Risk        | B               | 30500     | 2020-04-14       |
| Sm/RNP IgG                       | EL1-1040  | Low Risk        | B               | 30464     | 2020-04-14       |
| Sm IgG                           | EL1-1041  | Low Risk        | B               | 17276     | 2020-04-14       |
| Jo-1 IgG                         | EL21-1029 | Low Risk        | C               | 30461     | 2020-04-14       |
| Scl-70 IgG                       | EL1-1039  | Low Risk        | B               | 30463     | 2020-04-14       |
| SS-A (Ro)                        | EL1-1042  | Low Risk        | B               | 44202     | 2020-04-14       |
| SS-B (La)                        | EL1-1043  | Low Risk        | B               | 44202     | 2020-04-14       |
| dsDNA                            | EL1-1023  | Low Risk        | B               | 30458     | 2020-04-14       |
| Cardiolipin IgG                  | EL1-1021  | Low Risk        | C               | 30475     | 2020-04-14       |
| Cardiolipin IgM                  | EL1-1022  | Low Risk        | C               | 30475     | 2020-04-14       |
| Cardiolipin IgA                  | EL1-1020  | Low Risk        | C               | 30475     | 2020-04-14       |
| Cardiolipin Total Ab             | EL1-1044  | Low Risk        | C               | 30475     | 2020-04-14       |
| Mitochondrial Antibody (MA)      | EL1-1031  | Low Risk        | C               | 30476     | 2020-04-14       |
| Thyroglobulin Antigen (Anti-Tg)  | EL3-1016  | Low Risk        | C               | 30315     | 2020-04-14       |
| PR3 (c-ANCA)                     | EL20-1033 | Low Risk        | B               | 30484     | 2020-04-14       |
| ANCA screen IgG                  | EL10-1010 | Low Risk        | B               | 30483     | 2020-04-14       |
| MPO, Myeloperoxidase (p-ANCA)    | EL20-1032 | Low Risk        | B               | 30483     | 2020-04-14       |
| Gliadin IgG                      | EL36-1026 | Low Risk        | C               | 30480     | 2020-04-14       |
| Gliadin IgA                      | EL36-1027 | Low Risk        | C               | 30480     | 2020-04-14       |
| TPO                              | EL1-1012  | Low Risk        | C               | 30317     | 2020-04-14       |
| Anti-Phospholipids Screen        | EL20-1013 | Low Risk        | B               | 30582     | 2020-04-14       |
| ASMA                             | EL29-1302 | Low Risk        | B               | 30274     | 2020-04-14       |
| Beta-2-Glycoprotein IgA          | EL2-1017  | Low Risk        | B               | 30478     | 2020-04-14       |
| Beta-2-Glycoprotein IgG          | EL2-1018  | Low Risk        | B               | 30478     | 2020-04-14       |
| Beta-2-Glycoprotein IgM          | EL2-1019  | Low Risk        | B               | 30478     | 2020-04-14       |
| <b>Tumor markers</b>             |           |                 |                 |           |                  |
| Prostatic Acid Phosphatase (PAP) | EL2-1289  | Low Risk        | C               | 34226     | 2020-04-14       |
| Beta-2-Microglobulin             | EL2-1277  | Low Risk        | C               | 30296     | 2020-04-14       |
| AFP (Alpha Fetoprotein)          | EL1-1276  | Low Risk        | C               | 43480     | 2020-04-14       |
| CEA                              | EL1-1283  | Low Risk        | C               | 30288     | 2020-04-14       |
| CA-15-3                          | EL1-1279  | Low Risk        | C               | 30279     | 2020-04-14       |
| CA-12-5                          | EL1-1278  | Low Risk        | C               | 30283     | 2020-04-14       |

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|--------------------------------------------------------|-----------|-----------------|-----------------|-----------|------------------|
| CA-19-9                                                | EL1-1280  | Low Risk        | C               | 30280     | 2020-04-14       |
| NSE                                                    | EL2-1286  | Low Risk        | C               | 30301     | 2020-04-14       |
| Free Beta HCG                                          | EL1-1284  | Low Risk        | C               | 30333     | 2020-04-14       |
| Pro-GRP (Gastrin-Releasing Peptide)                    | EL2-1290  | Low Risk        | C               | 44438     | 2020-04-14       |
| Chromogranin A                                         | EL1-1281  | Low Risk        | C               | 30289     | 2020-04-14       |
| HE4                                                    | EL1-1306  | Low Risk        | C               | 30289     | 2020-04-14       |
| Cyfra21-1                                              | EL2-1034  | Low Risk        | C               | 30289     | 2020-04-14       |
| <b>Bone Metabolism</b>                                 |           |                 |                 |           |                  |
| Intact PTH                                             | EL3-1048  | Low Risk        | C               | 30353     | 2020-04-14       |
| 25-OH Vitamin D                                        | EL1-1045  | Low Risk        | B               | 30350     | 2020-04-14       |
| ACTH                                                   | EL3-1046  | Low Risk        | C               | 39005     | 2020-04-14       |
| <b>Cardiac</b>                                         |           |                 |                 |           |                  |
| Digoxin                                                | EL3-1051  | Low Risk        | C               | 30386     | 2020-04-14       |
| CK-MB                                                  | EL3-1050  | Low Risk        | C               | 30499     | 2020-04-14       |
| Troponin I                                             | EL1-1054  | Low Risk        | C               | 30266     | 2020-04-14       |
| Myoglobin                                              | EL6-1053  | Low Risk        | C               | 30264     | 2020-04-14       |
| C-Reactive Protein (CRP)                               | EL1-1049  | Low Risk        | C               | 30499     | 2020-04-14       |
| <b>Diabetes</b>                                        |           |                 |                 |           |                  |
| Insulin                                                | EL1-1058  | Low Risk        | C               | 30338     | 2020-04-14       |
| C-peptide                                              | EL1-1055  | Low Risk        | C               | 30336     | 2020-04-14       |
| Leptin                                                 | EL9-1059  | Low Risk        | B               | 12069017  | 2020-04-14       |
| Adiponectin                                            | EL9-1056  | Low Risk        | B               | 12069017  | 2020-04-14       |
| (IGFBP-1) Insulin-Like Growth Factor Binding Protein-1 | EL9-1057  | Low Risk        | B               | 42852     | 2020-04-14       |
| Anti-GAD                                               | EL8-1060  | Low Risk        | B               | 30340     | 2020-04-14       |
| IAA                                                    | EL8-1061  | Low Risk        | B               | 30339     | 2020-04-14       |
| IGF-1                                                  | EL8-1062  | Low Risk        | B               | 30361     | 2020-04-14       |
| Pro-Insulin                                            | EL1-1063  | Low Risk        | C               | 42852     | 2020-04-14       |
| <b>Fertility</b>                                       |           |                 |                 |           |                  |
| Human Growth Hormone (HGH)                             | EL1-1083  | Low Risk        | B               | 30333     | 2020-04-14       |
| hCG Visual                                             | EL6-1082  | Low Risk        | B               | 30513     | 2020-04-14       |
| Beta hCG (Total)                                       | EL2-1078  | Low Risk        | B               | 30332     | 2020-04-14       |
| FSH                                                    | EL1-1080  | Low Risk        | B               | 31533     | 2020-04-14       |
| LH                                                     | EL1-1084  | Low Risk        | B               | 38246     | 2020-04-14       |
| Prolactin                                              | EL1-1086  | Low Risk        | B               | 30325     | 2020-04-14       |
| PAPP-A                                                 | EL3-1085  | Low Risk        | B               | 31533     | 2020-04-14       |
| SHBG                                                   | EL3-1261  | Low Risk        | B               | 30326     | 2020-04-14       |
| AMH                                                    | EL3-1079  | Low Risk        | B               | 43148     | 2020-04-14       |
| hCG                                                    | EL1-1081  | Low Risk        | B               | 30332     | 2020-04-14       |
| Sperm Ab                                               | EL8-1087  | Low Risk        | B               | 30486     | 2020-04-14       |
| <b>Infectious Diseases</b>                             |           |                 |                 |           |                  |
| Adenovirus IgG                                         | EL15-1102 | Low Risk        | C               | 39468     | 2020-04-14       |
| Adenovirus IgA                                         | EL15-1101 | Low Risk        | C               | 39468     | 2020-04-14       |
| Adenovirus IgM                                         | EL15-1103 | Low Risk        | C               | 39468     | 2020-04-14       |
| Influenza A IgA                                        | EL15-1365 | Low Risk        | B               | 39463     | 2020-04-14       |
| Influenza A IgG                                        | EL15-1366 | Low Risk        | B               | 39463     | 2020-04-14       |

| ELISA Device Group                            | Ref. No.   | IVDD Risk class | IVDR Risk class | GMDN code | First CE-marking |
|-----------------------------------------------|------------|-----------------|-----------------|-----------|------------------|
| Influenza A IgM                               | EL15-1367  | Low Risk        | B               | 39463     | 2020-04-14       |
| Influenza B IgA                               | EL15-1368  | Low Risk        | B               | 39463     | 2020-04-14       |
| Influenza B IgG                               | EL15-1369  | Low Risk        | B               | 39463     | 2020-04-14       |
| Influenza B IgM                               | EL15-1370  | Low Risk        | B               | 39463     | 2020-04-14       |
| Chikungunya IgG                               | EL4-1114   | Low Risk        | D               | 32481     | 2020-04-14       |
| Chikungunya IgM                               | EL4-1113   | Low Risk        | D               | 32481     | 2020-04-14       |
| COVID-19 IgA                                  | EL45-1373  | Low Risk        | D               | 42994     | 2020-04-14       |
| COVID-19 IgG                                  | EL1-1360   | Low Risk        | D               | 42994     | 2020-04-14       |
| COVID-19 IgM                                  | EL1-1361   | Low Risk        | D               | 42994     | 2020-04-14       |
| COVID-19 IgG                                  | EL36-1360R | Low Risk        | D               | 42994     | 2020-04-14       |
| COVID-19 IgM                                  | EL36-1361R | Low Risk        | D               | 42994     | 2020-04-14       |
| COVID-19 IgG                                  | EL45-1360  | Low Risk        | D               | 42994     | 2020-04-14       |
| COVID-19 IgM                                  | EL45-1361  | Low Risk        | D               | 42994     | 2020-04-14       |
| COVID-19 Total Ab                             | EL45-1379  | Low Risk        | D               | 42994     | 2020-12-06       |
| Mycobacterium Tuberculosis (TB) IgA           | EL15-1317  | Low Risk        | C               | 30635     | 2020-04-14       |
| Mycobacterium Tuberculosis (TB) IgG           | EL15-1201  | Low Risk        | C               | 30635     | 2020-04-14       |
| Mycobacterium Tuberculosis (TB) IgM           | EL15-1202  | Low Risk        | C               | 30635     | 2020-04-14       |
| Herpes Simplex 1 IgG (HSV1 IgA)               | EL2-1162   | Low Risk        | C               | 38870     | 2020-04-14       |
| Herpes Simplex 1 IgG (HSV1 IgG)               | EL1-1163   | Low Risk        | C               | 38870     | 2020-04-14       |
| Herpes Simplex 1 IgM (HSV1 IgM)               | EL1-1164   | Low Risk        | C               | 38870     | 2020-04-14       |
| Herpes Simplex 2 IgG (HSV2 IgG)               | EL1-1165   | Low Risk        | C               | 38875     | 2020-04-14       |
| Herpes Simplex 2 IgM (HSV2 IgM)               | EL1-1166   | Low Risk        | C               | 38875     | 2020-04-14       |
| Herpes Simplex 1,2 IgG (HSV1,2 IgG)           | EL1-1167   | Low Risk        | C               | 40176     | 2020-04-14       |
| Herpes Simplex 1,2 IgM (HSV1,2 IgM)           | EL1-1168   | Low Risk        | C               | 40176     | 2020-04-14       |
| Epstein Barr Virus VCA IgA (EBV, VCA IgA)     | EL2-1135   | Low Risk        | D               | 30809     | 2020-04-14       |
| Epstein Barr Virus VCA IgG (EBV, VCA IgG)     | EL1-1136   | Low Risk        | D               | 30809     | 2020-04-14       |
| Epstein Barr Virus VCA IgM (EBV, VCA IgM)     | EL1-1137   | Low Risk        | D               | 30809     | 2020-04-14       |
| Epstein Barr Virus Early Antigen (EA) IgM     | EL2-1134   | Low Risk        | D               | 30809     | 2020-04-14       |
| Epstein Barr Virus Early Antigen (EA) IgG     | EL2-1133   | Low Risk        | D               | 30809     | 2020-04-14       |
| Epstein Barr Virus Early Antigen (EA) IgA     | EL2-1132   | Low Risk        | D               | 30809     | 2020-04-14       |
| Epstein Barr Virus Nuclear Antigen (EBNA) IgG | EL2-1130   | Low Risk        | D               | 30808     | 2020-04-14       |
| Epstein Barr Virus Nuclear Antigen (EBNA) IgM | EL2-1131   | Low Risk        | D               | 30808     | 2020-04-14       |
| Epstein Barr Virus Nuclear Antigen (EBNA) IgA | EL2-1129   | Low Risk        | D               | 30808     | 2020-04-14       |
| Measles IgG                                   | EL1-1177   | Low Risk        | C               | 44019     | 2020-04-14       |
| Measles IgM                                   | EL1-1178   | Low Risk        | C               | 44019     | 2020-04-14       |
| Mumps IgG                                     | EL1-1179   | Low Risk        | C               | 33908     | 2020-04-14       |
| Mumps IgM                                     | EL1-1180   | Low Risk        | C               | 33908     | 2020-04-14       |
| Mycoplasma pneumonia IgG                      | EL1-1181   | Low Risk        | C               | 30657     | 2020-04-14       |
| Mycoplasma pneumonia IgM                      | EL1-1182   | Low Risk        | C               | 30657     | 2020-04-14       |
| Syphilis (TPA) IgG                            | EL1-1195   | Low Risk        | C               | 30685     | 2020-04-14       |
| Syphilis (TPA) IgM                            | EL1-1197   | Low Risk        | C               | 30685     | 2020-04-14       |
| Legionella urine Ag detection                 | EL16-1175  | Low Risk        | C               | 30692     | 2020-04-14       |
| H. pylori IgG                                 | EL1-1140   | Low Risk        | B               | 30691     | 2020-04-14       |
| H. pylori IgA                                 | EL1-1139   | Low Risk        | B               | 30691     | 2020-04-14       |
| H-Pylori IgM                                  | EL1-1141   | Low Risk        | B               | 30691     | 2020-04-14       |
| H. pylori Antigen                             | EL2-1138   | Low Risk        | B               | 30691     | 2020-04-14       |

| ELISA Device Group           | Ref. No.               | IVDD Risk class | IVDR Risk class | GMDN code | First CE-marking |
|------------------------------|------------------------|-----------------|-----------------|-----------|------------------|
|                              | EL32-1138              |                 |                 |           |                  |
| Varicella-Zoster IgG         | EL1-1209               | Low Risk        | C               | 44027     | 2020-04-14       |
| Varicella-Zoster IgM         | EL1-1210               | Low Risk        | C               | 44027     | 2020-04-14       |
| HEV IgG                      | EL13-1156              | Low Risk        | C               | 30757     | 2020-04-14       |
| HEV IgM                      | EL13-1161              | Low Risk        | C               | 30758     | 2020-04-14       |
| HAV Ab                       | EL7-1142               | Low Risk        | C               | 30721     | 2020-04-14       |
| HAV IgM                      | EL7-1143               | Low Risk        | C               | 30722     | 2020-04-14       |
| HDV IgG                      | EL7-1153               | Low Risk        | D               | 30750     | 2020-04-14       |
| HDV IgM                      | EL7-1155               | Low Risk        | D               | 30752     | 2020-04-14       |
| HDV Ab                       | EL13-1315              | Low Risk        | D               | 30750     | 2020-04-14       |
| HDV Ag                       | EL13-1316,<br>EL7-1154 | Low Risk        | D               | 30747     | 2020-04-14       |
| HTLV 1 + 2 Ab                | EL7-1160               | Low Risk        | C               | 30789     | 2020-04-14       |
| Lyme Disease IgG             | EL10-1171              | Low Risk        | C               | 30697     | 2020-04-14       |
| Lyme Disease IgM             | EL10-1172              | Low Risk        | C               | 30697     | 2020-04-14       |
| Lyme Disease IgG, M          | EL10-1173              | Low Risk        | C               | 30697     | 2020-04-14       |
| Bordetella Pertussis IgA     | EL15-1110              | Low Risk        | C               | 37723     | 2020-04-14       |
| Bordetella Pertussis IgG     | EL15-1111              | Low Risk        | C               | 37723     | 2020-04-14       |
| Bordetella Pertussis IgM     | EL15-1112              | Low Risk        | C               | 37723     | 2020-04-14       |
| RSV IgA                      | EL15-1186              | Low Risk        | B               | 30814     | 2020-04-14       |
| RSV IgG                      | EL15-1187              | Low Risk        | B               | 30814     | 2020-04-14       |
| RSV IgM                      | EL15-1188              | Low Risk        | B               | 30814     | 2020-04-14       |
| Tetanus                      | EL5-1205               | Low Risk        | C               | 38876     | 2020-04-14       |
| Diphtheria IgG               | EL5-1124               | Low Risk        | D               | 33499     | 2020-04-14       |
| Salmonella typhi IgG         | EL1-1193               | Low Risk        | C               | 30709     | 2020-04-14       |
| Salmonella typhi IgM         | EL1-1194               | Low Risk        | C               | 30709     | 2020-04-14       |
| Salmonella Antigen detection | EL4-1192               | Low Risk        | C               | 30709     | 2020-04-14       |
| Anthrax IgG                  | EL1-1105               | Low Risk        | C               | 32481     | 2020-04-14       |
| Babesia IgG                  | EL4-1109               | Low Risk        | C               | 32481     | 2020-04-14       |
| Dengue IgM                   | EL5-1127               | Low Risk        | C               | 32481     | 2020-04-14       |
| Dengue IgG/IgM               | EL5-1125               | Low Risk        | C               | 32481     | 2020-04-14       |
| Dengue IgG                   | EL5-1126               | Low Risk        | C               | 32481     | 2020-04-14       |
| Dengue NS1 Antigen           | EL4-1128               | Low Risk        | C               | 32481     | 2020-04-14       |
| Japanese Encephalitis IgG    | EL4-1169               | Low Risk        | C               | 44321     | 2020-04-14       |
| Japanese Encephalitis IgM    | EL4-1170               | Low Risk        | C               | 44321     | 2020-04-14       |
| Leprosy IgG/IgM              | EL4-1176               | Low Risk        | C               | 32481     | 2020-04-14       |
| Parvovirus B19 IgG           | EL30-1183              | Low Risk        | C               | 40443     | 2020-04-14       |
| Parvovirus B19 IgM           | EL30-1184              | Low Risk        | C               | 40444     | 2020-04-14       |
| Rotavirus (fecal)            | EL16-1185              | Low Risk        | C               | 30815     | 2020-04-14       |
| Scrub Typhus IgG             | EL4-1199               | Low Risk        | C               | 44028     | 2020-04-14       |
| Scrub Typhus IgM             | EL4-1200               | Low Risk        | C               | 44028     | 2020-04-14       |
| TB IgA                       | EL15-1317              | Low Risk        | C               | 30635     | 2020-04-14       |
| TB IgG                       | EL15-1201              | Low Risk        | C               | 30635     | 2020-04-14       |
| TB IgM                       | EL15-1202              | Low Risk        | C               | 30635     | 2020-04-14       |
| Zika Virus IgG               | EL1-1203               | Low Risk        | C               | 32481     | 2020-04-14       |
| Zika Virus IgM               | EL1-1204               | Low Risk        | C               | 32481     | 2020-04-14       |

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|---------------------------------------------|-----------|-----------------|-----------------|-----------|------------------|
| West Nile IgG                               | EL4-1211  | Low Risk        | C               | 42926     | 2020-04-14       |
| West Nile IgM                               | EL4-1212  | Low Risk        | C               | 42926     | 2020-04-14       |
| <b>Parasitology</b>                         |           |                 |                 |           |                  |
| Schistosoma IgG                             | EL5-1227  | Low Risk        | C               | 30824     | 2020-04-14       |
| Chagas                                      | EL5-1213  | Low Risk        | D               | 30820     | 2020-04-14       |
| Cysticercosis IgG (T. solium)               | EL5-1220  | Low Risk        | B               | 39979     | 2020-04-14       |
| Campylobacter                               | EL16-1229 | Low Risk        | B               | 33948     | 2020-04-14       |
| E. coli 0157 Ag detection                   | EL16-1232 | Low Risk        | B               | 37727     | 2020-04-14       |
| E. histolytica IgG (Amebiasis)              | EL5-1221  | Low Risk        | B               | 39979     | 2020-04-14       |
| E. histolytica Dispar                       | EL16-1233 | Low Risk        | B               | 39979     | 2020-04-14       |
| Echinococcus IgG                            | EL5-1222  | Low Risk        | B               | 30822     | 2020-04-14       |
| Fasciola IgG                                | EL5-1216  | Low Risk        | B               | 34068     | 2020-04-14       |
| Fasciola gigantica                          | EL5-1217  | Low Risk        | B               | 34068     | 2020-04-14       |
| Filaria IgG4                                | EL4-1218  | Low Risk        | B               | 34068     | 2020-04-14       |
| Leishmania                                  | EL5-1223  | Low Risk        | C               | 30823     | 2020-04-14       |
| Leptospira IgG                              | EL5-1224  | Low Risk        | C               | 30716     | 2020-04-14       |
| Leptospira IgM                              | EL5-1226  | Low Risk        | C               | 30716     | 2020-04-14       |
| Leptospira IgG/IgM                          | EL5-1225  | Low Risk        | C               | 30716     | 2020-04-14       |
| Toxocara IgG                                | EL5-1228  | Low Risk        | C               | 34068     | 2020-04-14       |
| Trichinella IgG                             | EL5-1215  | Low Risk        | C               | 33379     | 2020-04-14       |
| Ascaris IgG                                 | EL5-1219  | Low Risk        | B               | 39979     | 2020-04-14       |
| Strongyloides IgG                           | EL5-1214  | Low Risk        | C               | 34068     | 2020-04-14       |
| Crypto/Giardia Ag detection                 | EL16-1230 | Low Risk        | B               | 30675     | 2020-04-14       |
| Cryptosporidium Ag detection                | EL16-1231 | Low Risk        | B               | 30675     | 2020-04-14       |
| Giardia antigen                             | EL16-1235 | Low Risk        | B               | 36173     | 2020-04-14       |
| Giardia coprpantigen in stool               | EL5-1361  | Low Risk        | B               | 36173     | 2020-04-14       |
| Anti-Giardia IgA ELISA in saliva            | EL5-1362  | Low Risk        | B               | 36173     | 2020-04-14       |
| Entamoeba histolytica coproantigen in stool | EL5-1363  | Low Risk        | B               | 39979     | 2020-04-14       |
| Adenovirus Antigen                          | EL16-1104 | Low Risk        | C               | 41274     | 2020-04-14       |
| <b>Steroid</b>                              |           |                 |                 |           |                  |
| Aldosterone                                 | EL3-1247  | Low Risk        | C               | 31428     | 2020-04-14       |
| Cortisol                                    | EL1-1249  | Low Risk        | C               | 31394     | 2020-04-14       |
| Aldosterone                                 | EL3-1247  | Low Risk        | B               | 31428     | 2020-04-14       |
| Cortisol                                    | EL1-1249  | Low Risk        | C               | 31394     | 2020-04-14       |
| Cortisol Saliva                             | EL9-1250  | Low Risk        | C               | 31394     | 2020-04-14       |
| Estradiol                                   | EL1-1254  | Low Risk        | B               | 30321     | 2020-04-14       |
| DHEA-S                                      | EL1-1251  | Low Risk        | C               | 30320     | 2020-04-14       |
| DHEA                                        | EL3-1252  | Low Risk        | C               | 39894     | 2020-04-14       |
| Progesterone                                | EL1-1259  | Low Risk        | C               | 30323     | 2020-04-14       |
| Progesterone Saliva                         | EL9-1260  | Low Risk        | C               | 30294     | 2020-04-14       |
| Testosterone                                | EL1-1263  | Low Risk        | B               | 30327     | 2020-04-14       |
| Testosterone Saliva                         | EL9-1265  | Low Risk        | B               | 30327     | 2020-04-14       |
| Free Testosterone                           | EL1-1264  | Low Risk        | B               | 30327     | 2020-04-14       |
| Androstenedione                             | EL1-1248  | Low Risk        | C               | 30321     | 2020-04-14       |
| Free Estriol                                | EL1-1257  | Low Risk        | B               | 30330     | 2020-04-14       |
| Dihydrotestosterones (DHT)                  | EL9-1253  | Low Risk        | C               | 30327     | 2020-04-14       |

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|-----------------------------------------------------|----------|-----------------|-----------------|-----------|------------------|
| 17-OH Progesterone                                  | EL1-1245 | Low Risk        | C               | 30324     | 2020-04-14       |
| 5a-Androstane-3a, 17b-diol Glucuronide (3a- Diol G) | EL9-1246 | Low Risk        | C               | 31533     | 2020-04-14       |
| Total Estrogen                                      | EL9-1255 | Low Risk        | B               | 38858     | 2020-04-14       |
| Estrone                                             | EL3-1256 | Low Risk        | B               | 33293     | 2020-04-14       |
| Pregnenolone                                        | EL9-1258 | Low Risk        | B               | 33301     | 2020-04-14       |
| Total Estriol                                       | EL8-1266 | Low Risk        | B               | 30330     | 2020-04-14       |
| <b>Thyroid</b>                                      |          |                 |                 |           |                  |
| T3                                                  | EL1-1270 | Low Risk        | C               | 30314     | 2020-04-14       |
| T4                                                  | EL1-1271 | Low Risk        | C               | 30312     | 2020-04-14       |
| TSH                                                 | EL1-1273 | Low Risk        | C               | 30489     | 2020-04-14       |
| U-TSH                                               | EL6-1275 | Low Risk        | C               | 30489     | 2020-04-14       |
| Free T4                                             | EL1-1268 | Low Risk        | C               | 30308     | 2020-04-14       |
| Free T3                                             | EL1-1267 | Low Risk        | C               | 30309     | 2020-04-14       |
| Reverse T3                                          | EL9-1274 | Low Risk        | C               | 30311     | 2020-04-14       |
| T Uptake                                            | EL3-1269 | Low Risk        | C               | 30313     | 2020-04-14       |
| Tg (Thyroglobulin)                                  | EL1-1272 | Low Risk        | C               | 30490     | 2020-04-14       |
| TBG (Thyroxine-Binding Globulin)                    | EL3-1262 | Low Risk        | C               | 30316     | 2020-04-14       |
| <b>Neo-Natal Panel</b>                              |          |                 |                 |           |                  |
| Neo-Natal T4                                        | EL1-1240 | Low Risk        | C               | 30273     | 2020-04-14       |
| Neo-Natal TSH                                       | EL1-1239 | Low Risk        | C               | 30310     | 2020-04-14       |
| Neo-Natal TBG                                       | EL3-1242 | Low Risk        | C               | 30316     | 2020-04-14       |
| Neo-Natal 17-OH Progesterone                        | EL1-1236 | Low Risk        | C               | 30324     | 2020-04-14       |
| Neo-Natal MSUD                                      | EL1-1237 | Low Risk        | C               | 30273     | 2020-04-14       |
| Neo-Natal PKU                                       | EL1-1238 | Low Risk        | C               | 30273     | 2020-04-14       |
| Neo-Natal IRT                                       | EL1-1241 | Low Risk        | C               | 30273     | 2020-04-14       |
| Neo-Natal Total Galactose                           | EL1-1243 | Low Risk        | C               | 30273     | 2020-04-14       |
| G6PD                                                | EL1-1303 | Low Risk        | C               | 30273     | 2020-04-14       |
| Neo-Natal Biotinidase                               | EL1-1244 | Low Risk        | C               | 30273     | 2020-04-14       |
| <b>Others</b>                                       |          |                 |                 |           |                  |
| Procalcitonin                                       | EL3-1309 | Low Risk        | C               | 12069016  | 2020-04-14       |
| Calcitonin                                          | EL3-1292 | Low Risk        | C               | 30342     | 2020-04-14       |
| Renin                                               | EL9-1300 | Low Risk        | B               | 43444     | 2020-04-14       |

| IFA Device Group                      | Ref. No.                        | IVDD Risk class | IVDR Risk class | GMDN code | First CE-marking |
|---------------------------------------|---------------------------------|-----------------|-----------------|-----------|------------------|
| <b>Autoimmune Diseases and others</b> |                                 |                 |                 |           |                  |
| ANA Rat Liver IFA Kit                 | IF17-4002, IF17-4019            | Low Risk        | C               | 41420     | 2020-04-14       |
| ANA Mouse Kidney IFA Kit              | IF17-4003                       | Low Risk        | C               | 41420     | 2020-04-14       |
| ANA Hep-2 IFA Kit                     | IF17-4004, IF17-4005, IF17-4018 | Low Risk        | C               | 17269     | 2020-04-14       |
| AMA IFA Kit                           | IF17-4022, IF17-4023            | Low Risk        | C               | 17267     | 2020-04-14       |
| AAS Rat Kidney Stomach Liver Tissue   | IF17-4000                       | Low Risk        | C               | 30274     | 2020-04-14       |

| IFA Device Group                                  | Ref. No.                              | IVDD Risk class | IVDR Risk class | GMDN code | First CE-marking |
|---------------------------------------------------|---------------------------------------|-----------------|-----------------|-----------|------------------|
| ASMA IFA Kit                                      | IF17-4006,<br>IF17-4015               | Low Risk        | C               | 30274     | 2020-04-14       |
| ATA IFA Kit                                       | IF17-4030,<br>IF174031                | Low Risk        | C               | 30274     | 2020-04-14       |
| ASA IFA Kit                                       | IF17-4008,<br>IF17-4034               | Low Risk        | C               | 30274     | 2020-04-14       |
| nDNA IFA Kit                                      | IF17-4007,<br>IF17-4051,<br>IF17-4052 | Low Risk        | C               | 30274     | 2020-04-14       |
| Endomysial (Primate Endomysial)                   | IF17-4032,<br>IF17-4033               | Low Risk        | C               | 12109016  | 2020-04-14       |
| Anti-Reticulin IgA                                | IF17-4041,<br>IF17-4042               | Low Risk        | C               | 30526     | 2020-04-14       |
| Anti-Reticulin IgG                                | IF17-4043,<br>IF17-4044               | Low Risk        | C               | 30526     | 2020-04-14       |
| C-ANCA                                            | IF17-4059                             | Low Risk        | C               | 30484     | 2020-04-14       |
| P-ANCA                                            | IF17-4060                             | Low Risk        | C               | 30483     | 2020-04-14       |
| <b>Bacterial Diseases</b>                         |                                       |                 |                 |           |                  |
| Legionella pneumophila 1-6 IFA Poly (HT)          | IF17-4063,<br>IF17-4064               | Low Risk        | C               | 30694     | 2020-04-14       |
| Legionella pneumophila 1-6/bdglmj/C Specimen      | IF17-4061                             | Low Risk        | C               | 30694     | 2020-04-14       |
| Legionella pneumophila 1-6/bdglmj DFA Screen      | IF17-4062                             | Low Risk        | C               | 30694     | 2020-04-14       |
| FTA-ABS Double Stain (Syphilis) IFA Kit           | IF17-4013,<br>IF17-4066               | Low Risk        | C               | 32455     | 2020-04-14       |
| FTA-ABS (T. pallidum)                             | IF17-4012,<br>IF17-4067               | Low Risk        | C               | 32455     | 2020-04-14       |
| FTA-ABS (Syphilis) Titrable IFA Kit               | IF17-4014                             | Low Risk        | C               | 32455     | 2020-04-14       |
| <b>Viral diseases</b>                             |                                       |                 |                 |           |                  |
| HSV-1 IgG IFA Kit                                 | IF17-4016                             | Low Risk        | C               | 39502     | 2020-04-14       |
| HSV-2 IgG IFA Kit                                 | IF17-4080                             | Low Risk        | C               | 39502     | 2020-04-14       |
| HSV-1 IgM IFA Kit                                 | IF17-4017                             | Low Risk        | C               | 39502     | 2020-04-14       |
| HSV-2 IgM IFA Kit                                 | IF17-4081                             | Low Risk        | C               | 39502     | 2020-04-14       |
| HSV 1&2 IgG                                       | IF17-4078                             | Low Risk        | C               | 39502     | 2020-04-14       |
| HSV 1&2 IgM                                       | IF17-4079                             | Low Risk        | C               | 39502     | 2020-04-14       |
| EBV-VCA IgG IFA Kit                               | IF17-4074                             | Low Risk        | C               | 33971     | 2020-04-14       |
| EBV-VCA IgM IFA Kit                               | IF17-4075                             | Low Risk        | C               | 33971     | 2020-04-14       |
| EBV-EA IFA Kit                                    | IF17-4077                             | Low Risk        | C               | 33971     | 2020-04-14       |
| EBNA IFA Kit                                      | IF17-4076                             | Low Risk        | C               | 33971     | 2020-04-14       |
| RMSF Rocky Mountain Spotted Fever (R. rickettsii) | IF17-4065                             | Low Risk        | C               | 32473     | 2020-04-14       |
| Measles IgG IFA Kit                               | IF17-4092                             | Low Risk        | C               | 44019     | 2020-04-14       |
| Measles IgM IFA Kit                               | IF17-4093                             | Low Risk        | C               | 44019     | 2020-04-14       |
| Mumps IgG IFA Kit                                 | IF17-4094                             | Low Risk        | C               | 33908     | 2020-04-14       |
| Mumps IgM IFA Kit                                 | IF17-4095                             | Low Risk        | C               | 33908     | 2020-04-14       |
| RSV IgG (Respiratory Syncytial Virus)             | IF17-4096                             | Low Risk        | C               | 30814     | 2020-04-14       |

| IFA Device Group                      | Ref. No.  | IVDD Risk class | IVDR Risk class | GMDN code | First CE-marking |
|---------------------------------------|-----------|-----------------|-----------------|-----------|------------------|
| RSV IgM (Respiratory Syncytial Virus) | IF17-4097 | Low Risk        | C               | 30814     | 2020-04-14       |
| Varicella-Zoster Virus IgG IFA Kit    | IF17-4098 | Low Risk        | C               | 44027     | 2020-04-14       |
| Varicella-Zoster Virus IgM IFA Kit    | IF17-4099 | Low Risk        | C               | 44027     | 2020-04-14       |
| West Nile Virus IgG                   | IF17-4100 | Low Risk        | C               | 42926     | 2020-04-14       |
| West Nile Virus IgG                   | IF17-4101 | Low Risk        | C               | 42926     | 2020-04-14       |

| RT-PCR                    | Ref. No.  | IVDD Risk class | IVDR Risk class | GMDN code | First CE-marking |
|---------------------------|-----------|-----------------|-----------------|-----------|------------------|
| SARS-CoV-2                | PR31-8000 | Low Risk        | D               | 42994     | 2020-04-14       |
| SARS-CoV-2                | PR4-8000  | Low Risk        | D               | 42994     | 2020-04-14       |
| SARS-CoV-2 pap-PCR        | PR45-8000 | Low Risk        | D               | 42994     | 2020-12-06       |
| SARS-CoV-2/Flu/RSV RT-PCR | PR31-8001 | Low Risk        | D               | 42994     | 2020-12-06       |

| Rapid Tests Device Group                                             | Ref. No.  | IVDD Risk class | IVDR Risk class | GMDN code | First CE-marking |
|----------------------------------------------------------------------|-----------|-----------------|-----------------|-----------|------------------|
| <b>Tumor Markers Tests</b>                                           |           |                 |                 |           |                  |
| FOB Cassette                                                         | RT27-2182 | Low Risk        | C               | 38217     | 2020-04-14       |
| FOB Strip                                                            | RT27-2181 | Low Risk        | C               | 38217     | 2020-04-14       |
| CEA                                                                  | RT27-2180 | Low Risk        | C               | 30288     | 2020-04-14       |
| AFP                                                                  | RT27-2179 | Low Risk        | C               | 30295     | 2020-04-14       |
| <b>Cardiac markers</b>                                               |           |                 |                 |           |                  |
| CK-MB Cassette (Serum/Plasma/Whole Blood)                            | RT27-2001 | Low Risk        | C               | 30499     | 2020-04-14       |
| C-Reactive Protein (CRP) Cassette (Serum/Plasma/Whole Blood)         | RT27-2003 | Low Risk        | C               | 30507     | 2020-04-14       |
| C-Reactive Protein (CRP) Strip (Serum/Plasma/Whole Blood)            | RT27-2002 | Low Risk        | C               | 30507     | 2020-04-14       |
| D-Dimer Cassette (Plasma/Whole Blood)                                | RT27-2004 | Low Risk        | C               | 30576     | 2020-04-14       |
| Myoglobin Cassette (Serum/Plasma/Whole Blood)                        | RT27-2005 | Low Risk        | C               | 30264     | 2020-04-14       |
| Troponin I Cassette (Serum/Plasma/Whole Blood)                       | RT27-2007 | Low Risk        | C               | 30509     | 2020-04-14       |
| 3 in 1 Troponin I/Myoglobin/CKMB Cassette (Serum/Plasma/Whole Blood) | RT27-2006 | Low Risk        | C               | 42649     | 2020-04-14       |
| <b>Drug Test</b>                                                     |           |                 |                 |           |                  |
| Alcohol Urine Strip                                                  | RT27-2010 | Low Risk        | B               | 30443     | 2020-04-14       |
| Alcohol Saliva Strip                                                 | RT27-2009 | Low Risk        | B               | 30443     | 2020-04-14       |
| Amphetamine Urine Cassette                                           | RT27-2012 | Low Risk        | C               | 30516     | 2020-04-14       |
| Amphetamine Urine Strip                                              | RT27-2011 | Low Risk        | C               | 30516     | 2020-04-14       |
| Barbiturates Urine Cassette                                          | RT27-2014 | Low Risk        | C               | 30517     | 2020-04-14       |
| Barbiturates Urine Strip                                             | RT27-2013 | Low Risk        | C               | 30517     | 2020-04-14       |
| Buprenorphine Urine Cassette                                         | RT27-2016 | Low Risk        | C               | 31584     | 2020-04-14       |
| Buprenorphine Urine Strip                                            | RT27-2015 | Low Risk        | C               | 31584     | 2020-04-14       |
| Benzodiazepine Urine Cassette                                        | RT27-2018 | Low Risk        | C               | 30518     | 2020-04-14       |
| Benzodiazepine Urine Strip                                           | RT27-2017 | Low Risk        | C               | 30518     | 2020-04-14       |
| Cocaine Urine Cassette                                               | RT27-2022 | Low Risk        | C               | 30520     | 2020-04-14       |
| Cocaine Urine Strip                                                  | RT27-2021 | Low Risk        | C               | 30520     | 2020-04-14       |

| Rapid Tests Device Group                 | Ref. No.  | IVDD Risk class | IVDR Risk class | GMDN code | First CE-marking |
|------------------------------------------|-----------|-----------------|-----------------|-----------|------------------|
| Cotinine Cassette                        | RT27-2024 | Low Risk        | C               | 37270     | 2020-04-14       |
| Cotinine Strip                           | RT27-2023 | Low Risk        | C               | 37270     | 2020-04-14       |
| EDDP Urine Cassette                      | RT27-2028 | Low Risk        | C               | 30521     | 2020-04-14       |
| EDDP Urine Strip                         | RT27-2027 | Low Risk        | C               | 30521     | 2020-04-14       |
| Fentanyl Urine Cassette                  | RT27-2030 | Low Risk        | C               | 31582     | 2020-04-14       |
| Fentanyl Urine Strip                     | RT27-2029 | Low Risk        | C               | 31582     | 2020-04-14       |
| Ketamine Urine Cassette                  | RT27-2032 | Low Risk        | C               | 31582     | 2020-04-14       |
| Ketamine Urine Strip                     | RT27-2031 | Low Risk        | C               | 31582     | 2020-04-14       |
| MDMA(Ecstasy) Cassette                   | RT27-2038 | Low Risk        | C               | 30423     | 2020-04-14       |
| MDMA(Ecstasy) Strip                      | RT27-2037 | Low Risk        | C               | 30423     | 2020-04-14       |
| Methadone (MTD) Urine Urine Cassette     | RT27-2040 | Low Risk        | C               | 30521     | 2020-04-14       |
| Methadone (MTD) Urine Urine Strip        | RT27-2039 | Low Risk        | C               | 30521     | 2020-04-14       |
| Methamphetamine Urine Cassette           | RT27-2042 | Low Risk        | C               | 30423     | 2020-04-14       |
| Methamphetamine Urine Strip              | RT27-2041 | Low Risk        | C               | 30423     | 2020-04-14       |
| Marijuana (THC) Urine Cassette           | RT27-2057 | Low Risk        | C               | 30519     | 2020-04-14       |
| Marijuana (THC) Urine Strip              | RT27-2056 | Low Risk        | C               | 30519     | 2020-04-14       |
| Opiates Urine Cassette                   | RT27-2044 | Low Risk        | C               | 30522     | 2020-04-14       |
| Opiates Urine Strip                      | RT27-2043 | Low Risk        | C               | 30522     | 2020-04-14       |
| Oxycodone Urine Cassette                 | RT27-2047 | Low Risk        | C               | 31584     | 2020-04-14       |
| Oxycodone Urine Strip                    | RT27-2046 | Low Risk        | C               | 31584     | 2020-04-14       |
| Phencyclidine (PCP) Urine Cassette       | RT27-2049 | Low Risk        | C               | 30523     | 2020-04-14       |
| Phencyclidine (PCP) Urine Strip          | RT27-2048 | Low Risk        | C               | 30435     | 2020-04-14       |
| Tricyclic Antidepressants (TCA) Cassette | RT27-2055 | Low Risk        | C               | 30524     | 2020-04-14       |
| Tricyclic Antidepressants (TCA) Strip    | RT27-2054 | Low Risk        | C               | 30523     | 2020-04-14       |
| Tramadol Urine Cassette                  | RT27-2059 | Low Risk        | C               | 31582     | 2020-04-14       |
| Tramadol Urine Strip                     | RT27-2058 | Low Risk        | C               | 31582     | 2020-04-14       |
| 2-Drug Cassette (Any Combination)        | RT27-2060 | Low Risk        | C               | 30261     | 2020-04-14       |
| 3-Drug Cassette (Any Combination)        | RT27-2061 | Low Risk        | C               | 30261     | 2020-04-14       |
| 4-Drug Cassette (Any Combination)        | RT27-2062 | Low Risk        | C               | 30261     | 2020-04-14       |
| 5-Drug Cassette (Any Combination)        | RT27-2063 | Low Risk        | C               | 30261     | 2020-04-14       |
| 6-Drug Cassette (Any Combination)        | RT27-2064 | Low Risk        | C               | 30261     | 2020-04-14       |
| 7-Drug Cassette (Any Combination)        | RT27-2065 | Low Risk        | C               | 30261     | 2020-04-14       |
| 8-Drug Cassette (Any Combination)        | RT27-2066 | Low Risk        | C               | 30261     | 2020-04-14       |
| 9-Drug Cassette (Any Combination)        | RT27-2067 | Low Risk        | C               | 30261     | 2020-04-14       |
| 10-Drug Cassette (Any Combination)       | RT27-2068 | Low Risk        | C               | 30261     | 2020-04-14       |
| 11-Drug Cassette (Any Combination)       | RT27-2069 | Low Risk        | C               | 30261     | 2020-04-14       |
| 12-Drug Cassette (Any Combination)       | RT27-2070 | Low Risk        | C               | 30261     | 2020-04-14       |
| 2-Drug Strip (Any Combination)           | RT27-2071 | Low Risk        | C               | 30261     | 2020-04-14       |
| 3-Drug Strip (Any Combination)           | RT27-2072 | Low Risk        | C               | 30261     | 2020-04-14       |
| 4-Drug Strip (Any Combination)           | RT27-2073 | Low Risk        | C               | 30261     | 2020-04-14       |
| 5-Drug Strip (Any Combination)           | RT27-2074 | Low Risk        | C               | 30261     | 2020-04-14       |
| 6-Drug Strip (Any Combination)           | RT27-2075 | Low Risk        | C               | 30261     | 2020-04-14       |
| 7-Drug Strip (Any Combination)           | RT27-2076 | Low Risk        | C               | 30261     | 2020-04-14       |
| 8-Drug Strip (Any Combination)           | RT27-2077 | Low Risk        | C               | 30261     | 2020-04-14       |
| 9-Drug Strip (Any Combination)           | RT27-2078 | Low Risk        | C               | 30261     | 2020-04-14       |
| 10-Drug Strip (Any Combination)          | RT27-2079 | Low Risk        | C               | 30261     | 2020-04-14       |

| <b>Rapid Tests Device Group</b>                  | <b>Ref. No.</b>         | <b>IVDD Risk class</b> | <b>IVDR Risk class</b> | <b>GMDN code</b> | <b>First CE-marking</b> |
|--------------------------------------------------|-------------------------|------------------------|------------------------|------------------|-------------------------|
| 11-Drug Strip (Any Combination)                  | RT27-2080               | Low Risk               | C                      | 30261            | 2020-04-14              |
| 12-Drug Strip (Any Combination)                  | RT27-2081               | Low Risk               | C                      | 30261            | 2020-04-14              |
| <b>Drug Test/Cup</b>                             |                         |                        |                        |                  |                         |
| 2-Drug Cup (Any Combination)                     | RT27-2082               | Low Risk               | C                      | 30261            | 2020-04-14              |
| 3-Drug Cup (Any Combination)                     | RT27-2083               | Low Risk               | C                      | 30261            | 2020-04-14              |
| 4-Drug Cup (Any Combination)                     | RT27-2084               | Low Risk               | C                      | 30261            | 2020-04-14              |
| 5-Drug Cup (Any Combination)                     | RT27-2085               | Low Risk               | C                      | 30261            | 2020-04-14              |
| 6-Drug Cup (Any Combination)                     | RT27-2086               | Low Risk               | C                      | 30261            | 2020-04-14              |
| 7-Drug Cup (Any Combination)                     | RT27-2087               | Low Risk               | C                      | 30261            | 2020-04-14              |
| 8-Drug Cup (Any Combination)                     | RT27-2088               | Low Risk               | C                      | 30261            | 2020-04-14              |
| 9-Drug Cup (Any Combination)                     | RT27-2089               | Low Risk               | C                      | 30261            | 2020-04-14              |
| 10-Drug Cup (Any Combination)                    | RT27-2090               | Low Risk               | C                      | 30261            | 2020-04-14              |
| 11-Drug Cup (Any Combination)                    | RT27-2091               | Low Risk               | C                      | 30261            | 2020-04-14              |
| 12-Drug Cup (Any Combination)                    | RT27-2092               | Low Risk               | C                      | 30261            | 2020-04-14              |
| <b>Infectious Diseases and others</b>            |                         |                        |                        |                  |                         |
| Legionella Urinary Antigen Cassette              | RT27-2147               | Low Risk               | C                      | 30692            | 2020-04-14              |
| Legionella Urinary Antigen Strip                 | RT27-2146               | Low Risk               | C                      | 30692            | 2020-04-14              |
| Adeno/Rotavirus Antigen Cassette                 | RT27-2131               | Low Risk               | C                      | 42994            | 2020-04-14              |
| Adeno Antigen Cassette                           | RT27-2132               | Low Risk               | C                      | 42994            | 2020-04-14              |
| Rotavirus Antigen Cassette                       | RT27-2161               | Low Risk               | C                      | 30815            | 2020-04-14              |
| Chagas Cassette                                  | RT27-2133               | Low Risk               | C                      | 30820            | 2020-04-14              |
| Chikungunya IgG/IgM Cassette                     | RT27-2135               | Low Risk               | C                      | 42994            | 2020-04-14              |
| Gonorrhoea Cassette                              | RT27-2140               | Low Risk               | C                      | 38851            | 2020-04-14              |
| Influenza A&B Cassette                           | RT27-2145               | Low Risk               | C                      | 39466            | 2020-04-14              |
| Leishmania IgG/IgM Cassette                      | RT27-2149               | Low Risk               | C                      | 30823            | 2020-04-14              |
| Leishmania Cutaneous Strip                       | RT27-2148               | Low Risk               | C                      | 30823            | 2020-04-14              |
| Leptospira IgG/IgM                               | RT27-2150               | Low Risk               | C                      | 30716            | 2020-04-14              |
| Syphilis Cassette                                | RT27-2172               | Low Risk               | C                      | 30687            | 2020-04-14              |
| Syphilis Strip                                   | RT27-2173,<br>RT24-2173 | Low Risk               | C                      | 30687            | 2020-04-14              |
| Mononucleosis Cassette (Mono) (S/P)              | RT27-2177               | Low Risk               | C                      | 30826            | 2020-04-14              |
| Strep A Cassette                                 | RT27-2169               | Low Risk               | C                      | 30826            | 2020-04-14              |
| Strep A Strip                                    | RT27-2168               | Low Risk               | C                      | 30826            | 2020-04-14              |
| Strep B Cassette                                 | RT27-2171               | Low Risk               | C                      | 30827            | 2020-04-14              |
| Strep B Strip                                    | RT27-2170               | Low Risk               | C                      | 30827            | 2020-04-14              |
| H1N1 Strip                                       | RT40-2209               | Low Risk               | C                      | 39461            | 2020-04-14              |
| H. Pylori Ab Cassette (Serum/Plasma)             | RT27-2141               | Low Risk               | B                      | 30825            | 2020-04-14              |
| H. Pylori Ab Cassette (Serum/Plasma/Whole Blood) | RT27-2142,<br>RT24-2142 | Low Risk               | B                      | 30825            | 2020-04-14              |
| H. Pylori Antigen Cassette                       | RT27-2143,<br>RT24-2203 | Low Risk               | B                      | 30689            | 2020-04-14              |
| HAV IgM                                          | RT27-2108               | Low Risk               | C                      | 30720            | 2020-04-14              |
| Dengue IgG&IgM                                   | RT27-2138,<br>RT24-2197 | Low Risk               | C                      | 42994            | 2020-04-14              |
| Dengue NS1                                       | RT24-2139               | Low Risk               | C                      | 42994            | 2020-04-14              |
| Dengue IgG/IgM/NS1                               | RT24-2208               | Low Risk               | C                      | 42994            | 2020-04-14              |

| Rapid Tests Device Group             | Ref. No.                              | IVDD Risk class | IVDR Risk class | GMDN code | First CE-marking |
|--------------------------------------|---------------------------------------|-----------------|-----------------|-----------|------------------|
| Malaria P.f./Pv                      | RT24-2204                             | Low Risk        | C               | 30674     | 2020-04-14       |
| Malaria Pan                          | RT24-2206                             | Low Risk        | C               | 30674     | 2020-04-14       |
| Malaria P.f./Pan                     | RT24-2205,<br>RT27-2154               | Low Risk        | C               | 30674     | 2020-04-14       |
| Malaria P.f. Cassette                | RT24-2207,<br>RT27-2151               | Low Risk        | C               | 30674     | 2020-04-14       |
| Malaria P.f. Strip                   | RT27-2152                             | Low Risk        | C               | 30674     | 2020-04-14       |
| Malaria P.f./vivax                   | RT27-2153                             | Low Risk        | C               | 30674     | 2020-04-14       |
| Norovirus                            | RT27-2156                             | Low Risk        | C               | 32459     | 2020-04-14       |
| Salmonella typhi Antigen Cassette    | RT27-2163                             | Low Risk        | C               | 30709     | 2020-04-14       |
| Salmonella typhi IgG/IgM Cassette    | RT27-2164                             | Low Risk        | C               | 30709     | 2020-04-14       |
| Salmonella typhi/paratyphi antigen   | RT27-2165                             | Low Risk        | C               | 30709     | 2020-04-14       |
| Scrub typhus IgG Strip               | RT4-2166                              | Low Risk        | C               | 30717     | 2020-04-14       |
| Scrub typhus IgM Strip               | RT4-2167                              | Low Risk        | C               | 30717     | 2020-04-14       |
| Zika Virus IgG/IgM Cassette          | RT27-2178                             | Low Risk        | C               | 42994     | 2020-04-14       |
| COVID-19 IgG/IgM                     | RT24-2198,<br>RT28-2198,<br>RT45-2198 | Low Risk        | D               | 44022     | 2020-04-14       |
| SARS-CoV2 Antigen Rapid Test         | RT45-2214                             | Low Risk        | D               | 44022     | 2020-08-24       |
| Tuberculosis (TB) Cassette           | RT27-2175                             | Low Risk        | C               | 44020     | 2020-04-14       |
| Tuberculosis (TB) Strip              | RT27-2174                             | Low Risk        | C               | 44020     | 2020-04-14       |
| HEV IgG/IgM                          | RT27-2119                             | Low Risk        | D               | 30756     | 2020-04-14       |
| Cryptococcus Ag                      | RT27-2137                             | Low Risk        | C               | 37746     | 2020-04-14       |
| Hantavirus IgG/IgM                   | RT27-2144                             | Low Risk        | C               | 15048014  | 2020-04-14       |
| Mycoplasma pneumoniae Ag             | RT27-2155                             | Low Risk        | C               | 17311     | 2020-04-14       |
| Rickettsia IgG/IgM                   | RT24-2160                             | Low Risk        | C               | 30717     | 2020-04-14       |
| RSV                                  | RT27-2162                             | Low Risk        | C               | 30814     | 2020-04-14       |
| Tetanus                              | RT27-2176                             | Low Risk        | C               | 38876     | 2020-04-14       |
| <b>Fertility</b>                     |                                       |                 |                 |           |                  |
| FSH Urine Cassette                   | RT27-2094                             | Low Risk        | B               | 30512     | 2020-04-14       |
| FSH Urine Strip                      | RT27-2093                             | Low Risk        | B               | 30512     | 2020-04-14       |
| <b>Ovulation</b>                     |                                       |                 |                 |           |                  |
| LH Urine Cassette                    | RT27-2106                             | Low Risk        | B               | 30515     | 2020-04-14       |
| LH Urine Strip                       | RT27-2105                             | Low Risk        | B               | 30515     | 2020-04-14       |
| <b>Pregnancy</b>                     |                                       |                 |                 |           |                  |
| hCG 10 mIU/ml Midstream              | RT27-2099                             | Low Risk        | B               | 30513     | 2020-04-14       |
| hCG 20 mIU/ml Midstream              | RT27-2102                             | Low Risk        | B               | 30513     | 2020-04-14       |
| hCG 10mIU/ml urine Cassette          | RT27-2095                             | Low Risk        | B               | 30513     | 2020-04-14       |
| hCG 10mIU/ml urine Strip             | RT27-2097                             | Low Risk        | B               | 30513     | 2020-04-14       |
| hCG 10mIU/ml urine/serum             | RT27-2098                             | Low Risk        | B               | 30513     | 2020-04-14       |
| hCG 20 mIU/ml urine Cassette         | RT27-2101                             | Low Risk        | B               | 30513     | 2020-04-14       |
| hCG 20 mIU/ml urine Strip            | RT27-2100                             | Low Risk        | B               | 30513     | 2020-04-14       |
| hCG 10mIU/ml urine/serum/p           | RT27-2096                             | Low Risk        | B               | 30513     | 2020-04-14       |
| hCG 20 mIU/ml urine/serum/p Cassette | RT27-2104                             | Low Risk        | B               | 30513     | 2020-04-14       |
| hCG 20 mIU/ml urine/serum/p Strip    | RT27-2103                             | Low Risk        | B               | 30513     | 2020-04-14       |
| <b>Others</b>                        |                                       |                 |                 |           |                  |

| <b>Rapid Tests Device Group</b> | <b>Ref. No.</b> | <b>IVDD Risk class</b> | <b>IVDR Risk class</b> | <b>GMDN code</b> | <b>First CE-marking</b> |
|---------------------------------|-----------------|------------------------|------------------------|------------------|-------------------------|
| Micro-Albumin (HAS) Strip       | RT27-2197       | Low Risk               | C                      | 30246            | 2020-04-14              |
| Ferritin                        | RT27-2196       | Low Risk               | C                      | 30377            | 2020-04-14              |
| H-FABP                          | RT27-2107       | Low Risk               | C                      | 1230190          | 2020-04-14              |
| Nt-proBNP                       | RT27-1157       | Low Risk               | C                      | 12130190         | 2020-04-14              |
| Procalcitonin (S/P/WB)          | RT27-2158       | Low Risk               | C                      | 12069016         | 2020-04-14              |
| Procalcitonin (S/P)             | RT27-2159       | Low Risk               | C                      | 12069016         | 2020-04-14              |
| <b>Urine Reagent Strips</b>     |                 |                        |                        |                  |                         |
| URS-1G                          | RT27-2185       | Low Risk               | B                      | 17419            | 2020-04-14              |
| URS-2PK                         | RT27-2186       | Low Risk               | B                      | 30226            | 2020-04-14              |
| URS-3 GKpH                      | RT27-2187       | Low Risk               | B                      | 30226            | 2020-04-14              |
| URS-4 GKpHB                     | RT27-2188       | Low Risk               | B                      | 30226            | 2020-04-14              |
| URS-5GKpHBP                     | RT27-2189       | Low Risk               | B                      | 30226            | 2020-04-14              |
| URS-6GKpHBPBili                 | RT27-2190       | Low Risk               | B                      | 30226            | 2020-04-14              |
| URS-7GKpHBPBiliU                | RT27-2191       | Low Risk               | B                      | 30226            | 2020-04-14              |
| URS-8GKpHBPBiliUN               | RT27-2192       | Low Risk               | B                      | 30226            | 2020-04-14              |
| URS-9GKpHBPBiliUNS              | RT27-2193       | Low Risk               | B                      | 30226            | 2020-04-14              |
| URS-10GKpHBPBiliUNSL            | RT27-2194       | Low Risk               | B                      | 30226            | 2020-04-14              |
| URS-11                          | RT27-2195       | Low Risk               | B                      | 30226            | 2020-04-14              |

| <b>Serology Device Group</b>                          | <b>Ref. No.</b>      | <b>IVDD Risk class</b> | <b>IVDR Risk class</b> | <b>GMDN code</b> | <b>First CE-marking</b> |
|-------------------------------------------------------|----------------------|------------------------|------------------------|------------------|-------------------------|
| C- Reactive Protein (CRP)                             | SL25-3002, SL25-3003 | Low Risk               | C                      | 30499            | 2020-04-14              |
| RF                                                    | SL25-3008, SL25-3009 | Low Risk               | C                      | 30500            | 2020-04-14              |
| Anti- Streptolysin O(ASO)                             | SL25-3000, SL25-3001 | Low Risk               | C                      | 30495            | 2020-04-14              |
| Infectious Mononucleosis Screening (Mono)             | SL25-3004, SL25-3005 | Low Risk               | C                      | 30810            | 2020-04-14              |
| RPR                                                   | SL25-3011, SL25-3012 | Low Risk               | C                      | 17393            | 2020-04-14              |
| Lupus Erythematosus (SLE)                             | SL25-3007            | Low Risk               | C                      | 30487            | 2020-04-14              |
| TPHA                                                  | SL25-3016            | Low Risk               | C                      | 32453            | 2020-04-14              |
| Rotavirus                                             | SL25-3010            | Low Risk               | C                      | 17381            | 2020-04-14              |
| S. Aureus                                             | SL25-3013            | Low Risk               | C                      | 33887            | 2020-04-14              |
| Streptococci Lancefield grouping                      | SL25-3015            | Low Risk               | C                      | 17389            | 2020-04-14              |
| VDRL Antigen                                          | SL25-3017            | Low Risk               | C                      | 17395            | 2020-04-14              |
| PARATYPHOID A (Salmonella, flagellar a antigen)       | SL25-3022            | Low Risk               | C                      | 39453            | 2020-04-14              |
| PARATYPHOID B (Salmonella, flagellar b antigen)       | SL25-3023            | Low Risk               | C                      | 39453            | 2020-04-14              |
| PARATYPHOID C (Salmonella typhi, flagellar c antigen) | SL25-3024            | Low Risk               | C                      | 39453            | 2020-04-14              |
| SALMONELLA Group A Antigen (somatic antigen)          | SL25-3028            | Low Risk               | C                      | 39453            | 2020-04-14              |
| SALMONELLA Group B Antigen (somatic antigen)          | SL25-3029            | Low Risk               | C                      | 39453            | 2020-04-14              |

| Serology Device Group                                 | Ref. No.  | IVDD Risk class | IVDR Risk class | GMDN code | First CE-marking |
|-------------------------------------------------------|-----------|-----------------|-----------------|-----------|------------------|
| SALMONELLA Group C Antigen (somatic antigen)          | SL25-3030 | Low Risk        | C               | 39453     | 2020-04-14       |
| TYPHOID H (Salmonella typhi, flagellar d antigen)     | SL25-3031 | Low Risk        | C               | 39453     | 2020-04-14       |
| TYPHOID O (Salmonella typhi, somatic Group D antigen) | SL25-3032 | Low Risk        | C               | 39453     | 2020-04-14       |
| Brucella Melitensis                                   | SL25-3018 | Low Risk        | C               | 39536     | 2020-04-14       |
| Brucella Abortus                                      | SL25-3019 | Low Risk        | C               | 39536     | 2020-04-14       |
| PROTEUS OX2 (somatic antigen)                         | SL25-3026 | Low Risk        | C               | 39543     | 2020-04-14       |
| PROTEUS OX19 (somatic antigen)                        | SL25-3025 | Low Risk        | C               | 39543     | 2020-04-14       |
| PROTEUS OXK (somatic antigen)                         | SL25-3027 | Low Risk        | C               | 39543     | 2020-04-14       |



# Certificate of Registration

This is to certify the Quality Management System of:

**MONOCENT, INC.**  
9237 Eton Avenue  
Chatsworth, CA 91311

has been assessed and found to be in compliance with the requirements of

**ISO 9001:2015**

for the following scope:

**Manufacturing and Distribution of IVD Products  
(Serology, Rapid, ELISA, CLIA, IFA Test Systems and Instrumentation)**

IAF Code: 31 & 35

Certificate Number: **SARA-2019-CA-0253-01-A**

Originally Registered:  
January 10, 2020

Latest Issue:  
December 20, 2022

Certification Cycle:  
January 10, 2023 – January 9, 2026

Expiration Date:  
January 9, 2026

*President, SARA Registrar*



MSCB-194

This registration is subject to the company maintaining its system to the required standard which will be monitored annually by SARA Registrar. This certificate remains the property of Standards American Registrations Authority (SARA Registrar) and shall be returned immediately upon request.  
SARA Registrar Headquarter Mailing: 1807H Santa Rita Road, #175, Pleasanton, CA 94566



# Certificate of Registration

This is to certify the Quality Management System of:

**MONOCENT, INC.**  
9237 Eton Avenue  
Chatsworth, CA 91311

has been assessed and found to be in compliance with the requirements of

**ISO 13485:2016**

for the following scope:

**Manufacturing and Distribution of IVD Products  
(Serology, Rapid, ELISA, CLIA, IFA Test Systems and Instrumentation)**

Medical Device Code: In Vitro Diagnostics (IVD) & Non-active Medical Device

Certificate Number: **SARA-2019-CA-0253-02-A**

Originally Registered:  
January 10, 2020

Latest Issue:  
December 20, 2022

Certification Cycle:  
January 10, 2023 – January 9, 2026

Expiration Date:  
January 9, 2026

*President, SARA Registrar*



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## Calcitonin ELISA TEST SYSTEM

**REF** EL3-1292

 **96 TESTS**

**RUO**

### INTENDED USE

The Monocent, Inc.'s Calcitonin ELISA Test System is for the quantitative determination of Calcitonin Concentration in Human Serum by a Microplate Enzyme Immunoassay, Colorimetric.

### SUMMARY AND EXPLANATION

Calcitonin is a 32 amino acid alpha helix produced by the follicular cells of the thyroid gland. A cleavage product of procalcitonin (PCT), calcitonin is a product of the CALC1 gene in humans and provides support in regulating calcium homeostasis, lowering serum calcium concentrations and preventing hypercalcemia. Calcitonin is characterized by an N-terminal disulfide bridge, which contributes to its biological activity, and a C-terminal proline residue.

Calcitonin plays a role in calcium metabolism, with osteoclasts the most significant homeostatic targets. Calcitonin binds to CT receptors (CTRs) on osteoclasts, halting calcium resorption via prevention of cell differentiation and motility. CTR receptors are also found in the kidneys and hypothalamus, providing an excretion route for excess serum calcium. Calcitonin modulates calcium absorption via CTR receptors on renal tubules, preventing excess calcium uptake. CTR receptors belong to the family of G-protein coupled receptors, utilizing cAMP messengers to amplify and transduce signals initiated by calcitonin-CTR binding.

Calcitonin has emerged as a therapeutic avenue for hypercalcemia patients, utilized as a biomarker PCT for its rapid

biomarker for medullary carcinoma of the thyroid (MCT), providing a facile and direct measurement of carcinogenic activity. Calcitonin levels are typically low in normal populations, and elevated levels suggest the presence of hypercalcemia or potential loss of thyroid function.

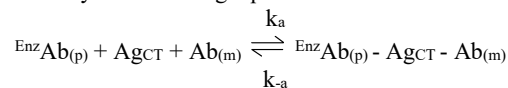
Medullary thyroid carcinoma is typically associated with elevated levels of calcitonin. Parafollicular C cells containing mutations in the RET gene will display elevated expression of calcitonin and the presence of nodules in the lymph nodes, potentially disrupting calcium homeostasis.

### PRINCIPLE OF THE TEST

#### Sandwich Equilibrium Method (Type 2):

The calcitonin immunoassay is an adapted two-site sandwich ELISA. In this assay, standards and patient samples are simultaneously incubated with the enzyme labeled detection antibody and a biotin coupled capture antibody on a coated microplate well. At the end of the assay incubation, the microwell is washed to remove unbound components and the enzyme bound to the solid phase is incubated with the substrate, tetramethylbenzidine (TMB). An acidic stopping solution is then added to stop the reaction and converts the color to yellow. The intensity of the yellow color is directly proportional to the concentration of calcitonin in the sample. Standards are used to generate a dose response curve of absorbance unit vs. concentration. Concentrations of calcitonin present in the controls and patient samples are determined directly from this curve.

The essential reagents required for a sandwich equilibrium assay include high affinity and specificity antibodies (signal and capture), with different and distinct epitope recognition, **in excess**, and native antigen. In this procedure, the calibrator, control or patient sample is added to the wells coated with anti-calcitonin antibody. Calcitonin from the sample binds to the anti-calcitonin (MoAb) on the wells. Subsequently an enzyme labeled anti-calcitonin is added to the wells. Calcitonin from the sample forms a sandwich between the two antibodies. Excess enzyme and sample is removed via a wash step. The interaction is illustrated by the following equation:



$\text{Ab}_{(m)}$  = Anti-calcitonin (MoAb) (On the Microwells in Excess Quantity)

$\text{AgCT}$  = Native Antigen (Variable Quantity)

$\text{EnzAb}_{(CT)}$  = Enzyme labeled Mouse  $\alpha$  CT (P) (Excess Quantity)

$\text{EnzAb}_{(CT)} - \text{AgCT} - \text{Ab}_{(m)}$  = Ag-Antibodies Sandwich complex

$k_a$  = Rate Constant of Association

$k_a$  = Rate Constant of Dissociation

The enzyme activity in the antibody-bound fraction is directly proportional to the native antigen concentration. By utilizing several different serum references of known antigen values, a

dose response curve can be generated from which the antigen concentration of an unknown can be ascertained.

A suitable substrate is added to the wells to generate color in varying intensity depending upon the concentration of calcitonin in the wells. The intensity of the color in the sample can be visually compared to the known calibrators to obtain qualitative results or the color development can be read with the help of a microplate spectrophotometer to obtain semi-quantitative results.

### MATERIALS AND COMPONENTS

- **Calcitonin Calibrators – 1.0 ml/vial (Dried)**  
Six (6) vials of references for Calcitonin at levels of 0(A), 10(B), 40(C), 150(D), 400(E) and 1000(F) pg/ml. Store at 2-8°C. *Reconstitute each vial with 1ml of distilled or deionized water.* The reconstituted calibrators are stable for 1 hour at 2-8°C. A preservative has been added. For longer periods after reconstitution, aliquot into smaller portions and freeze (<-20°C) for up to 3 months. Freeze and thawed cycles should be minimized to one time only.
- **Calcitonin Control M – 1.0 ml/vial (Dried)**  
One (1) vial of reference control for Calcitonin. Store at 2-8°C. *Reconstitute each vial with 1ml of distilled or deionized water.* The reconstituted control should be assayed immediately after reconstitution. A preservative has been added. For longer periods after reconstitution, aliquot into smaller portions and freeze (<-20°C) for up to 3 months. Freeze and thawed cycles should be minimized to one time only.
- **Calcitonin Enzyme Reagent – 6 ml/vial**  
One (1) vial containing streptavidin-HRP (horseradish peroxidase) in a protein-based buffer and a non-mercury preservative. Store at 2-8°C.
- **PCT Antibody Coated Plate – 96 wells**  
One 96-well microplate coated with procalcitonin antibody, packaged in an aluminum bag with a drying agent. Store at 2-8°C.
- **Wash Solution Concentrate – 20 ml/vial**  
One (1) vial containing a surfactant in buffered saline. A preservative has been added. Store at 2-8°C.
- **Substrate Reagent – 12 ml/vial**  
One (1) vial containing tetramethylbenzidine (TMB) and hydrogen peroxide (0.5M H<sub>2</sub>O<sub>2</sub>) in buffer. Store at 2-8°C.
- **Stop Solution – 8 ml/vial**  
One (1) vial containing a strong acid (0.5M H<sub>2</sub>SO<sub>4</sub>). Store at 2-8°C.
- **Product Instructions.**

**Note 1:** Do not use reagents beyond the kit expiration date.

**Note 2:** Do not expose reagents to heat, sun, or strong light. **Opened reagents are stable for sixty (60) days when stored at 2-8°C, unless otherwise specified. Kit and component stability are identified on label.**

**Note 3:** The above components are for a single 96-well microplate

**MATERIALS REQUIRED BUT NOT PROVIDED**

- Pipette capable of delivering 0.050ml (50µl) volumes with a precision of better than 1.5%.
- Dispenser(s) for repetitive deliveries of 0.050ml (50µl), 0.100ml (100µl), and 0.350ml (350µl) volumes with a precision of better than 1.5%.
- Microplate washers or a squeeze bottle (optional).
- Microplate Reader with 450nm and 620nm wavelength absorbance capability.
- Absorbent paper for blotting the microplate wells.
- Plastic wrap or microplate covers for incubation steps.
- Vacuum aspirator (optional) for wash steps.
- Timer.
- Quality control materials.

**STORAGE CONDITIONS**

- Store the kit at 2 – 8 °C.
- Keep microwells sealed in a dry bag with desiccants.
- The reagents are stable until expiration of the kit.
- Do not expose test reagents to heat, sun, or strong light.

**PRECAUTIONS**

*For In Vitro Diagnostic Use*  
**Not for Internal or External Use in Humans or Animals**

All products that contain human serum have been found to be non-reactive for Hepatitis B Surface Antigen, HIV 1&2 and HCV Antibodies by FDA licensed reagents. Since no known test can offer complete assurance that infectious agents are absent, all human serum products should be handled as potentially hazardous and capable of transmitting disease. Good laboratory procedures for handling blood products can be found in the Center for Disease Control / National Institute of Health, "Biosafety in Microbiological and Biomedical Laboratories," 2nd Edition, 1988, HHS Publication No. (CDC) 88-8395.

**Safe Disposal of kit components must be according to local regulatory and statutory requirement.**

**SPECIMEN COLLECTION AND PREPARATION**

The specimens shall be blood serum in type and the usual precautions in the collection of venipuncture samples should be observed. For accurate comparison to established normal values, a fasting morning serum sample should be obtained. The blood should be collected in a plain redtop venipuncture tube without additives or anti-coagulants. Allow the blood to clot for samples. Centrifuge the specimen to separate the serum from the cells.

Samples may be refrigerated at 2-8 °C for a maximum period of five (5) days. If the specimen(s) cannot be assayed within this time, the sample(s) may be stored at temperatures of -20 °C for

up to 30 days. Avoid use of contaminated devices. Avoid repetitive freezing and thawing. When assayed in duplicate, 0.100ml (100µl) of the specimen is required.

**REAGENT PREPARATION**

**1. Wash Buffer**

Dilute contents of wash solution concentrate to 1000ml with distilled or deionized water in a suitable storage container. Diluted buffer can be stored at 2-30°C for up to 60 days.

**TEST PROCEDURE**

*Before proceeding with the assay, bring all reagents, serum reference calibrators and controls to room temperature (20-27°C).*

***\*\*Test Procedure should be performed by a skilled individual or trained professional\*\****

1. Format the microplates’ wells for each serum reference calibrator, control and patient specimen to be assayed in duplicate. **Replace any unused microwell strips back into the aluminum bag, seal and store at 2-8°C.**
2. Pipette 0.050 ml (50 µl) of the appropriate serum reference calibrator, control or specimen into the assigned well.
3. Add 0.050 ml (50 µl) of the Enzyme Reagent to each well. **It is very important to dispense all reagents close to the bottom of the coated well.**
4. Swirl the microplate gently for 20-30 seconds to mix (500 – 600 rpm) and cover.
5. Incubate 60 minutes (1 hour) at room temperature.
6. Discard the contents of the microplate by decantation or aspiration. If decanting, tap and blot the plate dry with absorbent paper.
7. Add 0.350 ml (350 µl) of wash buffer (see Reagent Preparation Section), decant (tap and blot) or aspirate. Repeat two (2) additional times for a total of three (3) washes. **An automatic or manual plate washer can be used. Follow the manufacturer’s instruction for proper usage. If a squeeze bottle is employed, fill each well by depressing the container (avoiding air bubbles) to dispense the wash. Decant the wash and repeat two (2) additional times.**
8. Add 0.100 ml (100 µl) of Substrate Reagent to all wells. **Always add reagents in the same order to minimize reaction time differences between wells.**

**DO NOT SHAKE PLATE AFTER SUBSTRATE ADDITION**

9. Incubate at room temperature for twenty (20) minutes.
10. Add 0.050 ml (50 µl) of stop solution to each well and mix gently for 15-20 seconds. **Always add reagents in the same order to minimize reaction time differences between wells.**
11. Read the absorbance in each well at 450nm (using a reference wavelength of 630nm to minimize well imperfections) in a microplate reader. **The results should be read within fifteen (15) minutes of adding the stop solution.**

**Note 1:** For re-assaying specimens with concentrations greater than 1000 pg/ml, dilution should be performed.

**Note 2:** Do not use reagents that are contaminated or have bacterial growth.

**Note 3:** Cycle (start and stop) mixing (4 cycles) for 5-8 seconds/cycle is more efficient than one continuous (20-30 seconds) cycle to achieve homogeneity. A plate mixer can be used to perform the mixing cycles.

**Note 3:** It is extremely important to accurately dispense the correct volume with a calibrated pipette and by adding near the bottom of the microwells at an angle while touching the side of the well.

**QUALITY CONTROL**

Each laboratory should assay controls at levels in the low, medium and high ranges of the dose response curve for monitoring assay performance. These controls should be treated as unknowns and values determined in every test procedure performed. Quality control charts should be maintained to follow the performance of the supplied reagents. Pertinent statistical methods should be employed to ascertain trends. Significant deviation from established performance can indicate unnoticed change in experimental conditions or degradation of kit reagents. Fresh reagents should be used to determine the reason for the variations.

**CALCULATION OF RESULTS**

A dose response curve is used to ascertain the concentration of Calcitonin in unknown specimens.

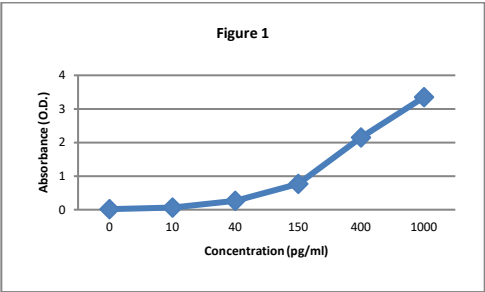
1. Record the absorbance obtained from the printout of the microplate reader as outlined in Example 1.
2. Plot the absorbance for each duplicate calibrator versus the corresponding calcitonin concentration in pg/ml on linear graph paper.
3. Connect the points with a best-fit curve.
4. To determine the concentration of calcitonin for an unknown, locate the average absorbance of the duplicates for each unknown on the vertical axis of the graph, find the intersecting point on the curve, and read the concentration (in pg/ml) from the horizontal axis of the graph (the duplicates of the unknown may be averaged as indicated).

**Note:** Computer data reduction software designed for ELISA assays may also be used for the data reduction. If such software is utilized, the validation of the software should be ascertained.

**EXAMPLE 1**

| Sample I.D. | Conc. (pg/ml) | Mean Abs |
|-------------|---------------|----------|
| Cal A       | 0             | 0.016    |
| Cal B       | 10            | 0.062    |
| Cal C       | 40            | 0.268    |
| Cal D       | 150           | 0.772    |
| Cal E       | 400           | 2.150    |
| Cal F       | 1000          | 3.347    |
| Control M   | 80            | 0.365    |

\*The data presented in Example 1 and Figure 1 is for illustration only and **should not** be used in lieu of a dose response curve prepared with each assay.



\*If the absorbance readout is off-scale or higher than the average absorbance of the highest calibrator, sample should be repeated with dilution.

**Q.C. PARAMETERS**

In order for the assay results to be considered valid the following criteria should be met:

- 1. The absorbance (OD) of calibrator F (1000 pg/ml) should be ≥2.0
- 2. Four out of six quality control pools should be within the established ranges.

**RISK ANALYSIS**

The MSDS and Risk Analysis Form for this product are available on request from Monocent Inc.

**Assay Performance**

- 1. It is important that the time of reaction in each well is held constant to achieve reproducible results.
- 2. Pipetting of samples should not extend beyond ten (10) minutes to avoid assay drift.
- 3. Highly lipemic, hemolyzed or grossly contaminated specimen(s) should not be used.
- 4. If more than one (1) plate is used, it is recommended to repeat the dose response curve.
- 5. The addition of substrate solution initiates a kinetic reaction, which is terminated by the addition of the stop solution. Therefore, the substrate and stop solution should be added in the same sequence to eliminate any time-deviation during reaction.
- 6. Plate readers measure vertically. Do not touch the bottom of the wells.
- 7. Failure to remove adhering solution adequately in the aspiration or decantation wash step(s) may result in poor replication and spurious results.
- 8. Use components from the same lot. No intermixing of reagents from different batches.

- 9. Accurate and precise pipetting, as well as following the exact time and temperature requirements prescribed are essential. Any deviation from Monocent’s IFU may yield inaccurate results.
- 10. All applicable national standards, regulations and laws, including, but not limited to, good laboratory procedures, must be strictly followed to ensure compliance and proper device usage.
- 11. It is important to calibrate all the equipment e.g., Pipettes, Readers, Washers and/or the automated instruments used with this device, and to perform routine preventative maintenance.

**Interpretation**

- 1. *Measurements and interpretation of results must be performed by a skilled individual or trained professional.*
- 2. Laboratory results alone are only one aspect for determining patient care and should not be the sole basis for therapy, particularly if the results conflict with other determinants.
- 3. The reagents for the test system procedure have been formulated to eliminate maximal interference; however, potential interaction between rare serum specimens and test reagents can cause erroneous results. Heterophilic antibodies often cause these interactions and have been known to be problematic for all kinds of immunoassays. (*Boscato LM Stuart MC. ‘Heterophilic antibodies: a problem for all immunoassays’ Clin.Chem. 1988:3427-33*). For diagnostic purposes, the results from this assay should be used in combination with clinical examination, patient history, and all other clinical findings.
- 4. For valid test results, adequate controls and other parameters must be within the listed ranges and assay requirements.
- 5. If test kits are altered, such as by mixing parts of different kits, which could produce false test results, or if results are incorrectly interpreted, Monocent shall have no liability.
- 6. If computer controlled data reduction is used to interpret the results of the test, it is imperative that the predicted values for the calibrators fall within 10% of the assigned concentrations.
- 7. The Calcitonin ELISA kit has exhibited no high dose hook effect with samples spiked with 1,000,000 pg/ml of calcitonin. Samples with calcitonin levels greater than the highest calibrator, however, should be diluted and re-assayed for correct values.

**EXPECTED RANGES OF VALUES**

Calcitonin levels were measured in thirty-one (31) apparently normal individuals. The values obtained ranged from 0.292 to 118.643 pg/ml. Based on statistical tests on skewness and kurtosis, the population, when transformed logarithmically, follows the normal or Gaussian distribution as shown in histograms. The geometric mean ± 2 standard deviations of the mean were calculated to be 4.49 to 41.83 pg/ml.

It is important to keep in mind that establishment of a range of values, which can be expected to be found by a given method for

a population of "normal" persons, is dependent upon a multiplicity of factors: the specificity of the method, the population tested and the precision of the method in the hands of the analyst. For these reasons, each laboratory should depend upon the range of expected values established by the Manufacturer only until an in-house range can be determined by the analysts using the method with a population indigenous to the area in which the laboratory is located.

**PERFORMANCE CHARACTERISTICS**

**Precision**

The within and between assay precisions of the Calcitonin ELISA Test System were determined by analysis of three different levels of pool control sera. The number (N), mean (X) value, standard deviation (σ) and coefficient of variation (C.V.) of each of these control sera are presented in Table 1 and Table 2.

| TABLE 1<br>Within Assay Precision (Values in pg/ml) |    |         |      |        |
|-----------------------------------------------------|----|---------|------|--------|
| Sample                                              | N  | X       | σ    | C.V. % |
| Low                                                 | 20 | 26.23   | 2.58 | 9.9    |
| Normal                                              | 20 | 65.50   | 3.67 | 5.57   |
| High                                                | 20 | 318.101 | 7.88 | 2.51   |

| TABLE 2<br>Between Assay Precision (Values in pg/ml) |    |        |       |       |
|------------------------------------------------------|----|--------|-------|-------|
| Sample                                               | N  | X      | σ     | C.V.% |
| Low                                                  | 20 | 26.03  | 3.81  | 14.62 |
| Normal                                               | 20 | 65.97  | 12.24 | 18.55 |
| High                                                 | 20 | 313.73 | 31.02 | 9.89  |

| Reagent<br>(fill) | Size | 96 (A)          | 192 (B)         |
|-------------------|------|-----------------|-----------------|
|                   | A)   | 1ml (dried) set | 1ml (dried) set |
|                   | B)   | 1ml (dried) set | 1ml (dried) set |
|                   | C)   | 1 (6ml)         | 2 (6ml)         |
|                   | D)   | 1 plate         | 2 plate         |
|                   | E)   | 1 (20ml)        | 1 (20ml)        |
|                   | F)   | 1 (12ml)        | 2 (12ml)        |
|                   | G)   | 1 (8ml)         | 2 (8ml)         |

**Sensitivity**

The Calcitonin ELISA Test System has a sensitivity of 4.4871 pg/ml. The sensitivity was ascertained by determining the variability of the 0 ng/ml serum calibrator and using the 2σ (95% certainty) statistic to calculate the minimum dose.

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