# **ELISA** for Human Apolipoprotein B

Product Code: 3715-1H-20

CONTENTS, development kit for 20 plates:

**Vial 1 (blue top)** Monoclonal antibody LDL 20/17 (500 µl) Concentration: 1 mg/ml

Vial 2 (red top) Biotinylated monoclonal antibody LDL 11 (250 µl) Concentration: 1 mg/ml

Vial 3 (white top) Streptavidin-Horseradish Peroxidase (250 µl)

Vial 4 Purified apoB standard

To ensure total recovery of stated quantity, vials have been overfilled.

#### **STORAGE:**

Shipped at ambient temperature. On arrival box 1 should be stored refrigerated at 4-8°C and box 2 should be stored frozen at -20°C.

## General

**Intended use:** For quantitative determination of human Apolipoprotein B (apoB) in serum/plasma samples or cell supernatant.

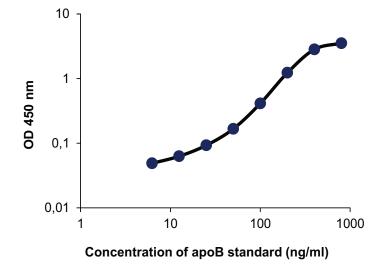
Serum/plasma samples: Please note that determination of analyte in human serum/plasma samples using this kit requires treatment of the samples with Triton X 100, add equal volume of 1% Triton X followed by vortex for 5 seconds. This assay also requires the use of Mabtech Assay buffer (product code: 3652-J2) for dilution of samples, standards and detection antibody. We recommend testing serum/plasma samples at three initial dilutions, e.g. 1:2000, 1:4000, 1:8000. The Assay buffer prevents false positive read-outs which may be caused by interference of heterophilic antibodies commonly found in human plasma and serum. The Assay buffer has been validated using serum/plasma from normal healthy human blood donors. Please note that heterophilic antibody interference in samples from human subjects with various diseases or other conditions has not been assessed. Please contact Mabtech for further information.

This kit is specific for the detection of apoB100 and does not recognize apoB48. The antibodies do not recognize delipidified apoB. Freezing and thawing plasma will reduce the recognition of apoB by these antibodies.

**Reagents:** Antibodies are supplied in sterile-filtered (0.2  $\mu$ m) PBS with sodium azide (0.02%). Streptavidin-HRP is supplied in PBS with 1% BSA and 0.15% Kathon CG.

Standard range: 8-800 ng/ml

**Standard calibration:** No international standard exists for calibration.



### Guidelines for Human Apolipoprotein B ELISA

- **Day 1** 1. Coat a high protein binding ELISA plate with mAb LDL 20/17, diluted to 2 μg/ml in PBS, pH 7.4, by adding 100 μl/well. Incubate overnight at 4-8°C.
- **Day 2** 2. Wash twice with PBS (200 μl/well).
  - 3. Block plate by adding 200 µl/well of PBS with 0.05% Tween 20 containing 0.1% BSA (incubation buffer). Incubate for 1 hour at room temperature.
  - 4. Wash five times with PBS containing 0.05% Tween.

Please note the special considerations for serum/plasma samples described above.

- 5. The apoB standard is supplied as purified LDL stabilised by 50% glycerol. The concentration is 1 mg/ml. For the test, prepare dilutions of the stock using the standard range as a guideline.
- 6. Add 100 μl/well of samples or standards diluted in incubation buffer or Assay buffer for serum/plasma samples Incubate for 1 to 2 hours at room temperature.
- 7. Wash as in step 4.
- 8. Add 100 μl/well of mAb LDL 11-biotin at 1 μg/ml in incubation buffer or Assay buffer for serum/plasma samples. Incubate for 1 hour at room temperature.
- 9. Wash as in step 4.
- 10. Add 100 μl/well of Streptavidin-HRP diluted 1:1000 in incubation buffer. Incubate for 1 hour at room temperature. **Please note that sodium azide used in buffers will inhibit HRP activity.**
- 11. Wash as in step 4.
- 12. Add 100 µl/well of appropriate substrate solution.
- 13. Measure the optical density in an ELISA reader after suitable developing time. If required stop the reaction first.

#### NOTE; for research use only.

MABTECH shall not be liable for the use or handling of the product or for consequential, special, indirect or incidental damages therefrom.

MABTECH AB Box 1233 SE-131 28 Nacka Strand Sweden Tel: +46 8 716 27 00 Fax: +46 8 716 27 01 E-mail: mabtech@mabtech.com www.mabtech.com

MABTECH Inc M.E.B. 220 3814 West Street Cincinnati, OH 45227 USA Tel: +1 513 871 4500 Fax: +1 513 871 7353 E-mail: mabtech.usa@mabtech.com

MABTECH AB Büro Deutschland Germany Tel: +49 40 4135 7935 Fax: +49 40 4135 7945 E-mail: mabtech.de@mabtech.com

2013-01-24



Developed and manufactured by MABTECH AB, Sweden, whose quality management system complies with the following standards:



MABTECH AUSTRALIA Pty Ltd resolvingIMAGES Unit 22, 196 Settlement Road Thomastown Victoria 3074 Australia Tel: +61 3 9466 4007 Fax: +61 3 9466 4003 E-mail: mabtech.au@mabtech.com

MABTECH AB Bureau de liaison France BP 255, 1300 route des Crêtes 06905 Sophia Antipolis France Tel: +33 (0)4 92 38 80 70 Fax:+33 (0)4 92 38 80 71 E-mail: mabtech.fr@mabtech.com