# Human Granzyme B ELISA development kit

Product Code: 3485-1A-6

## CONTENTS, development kit for 6 plates:

### Vial 1 (red top)

Monoclonal antibody GB10 (150 µl)

Concentration: 1 mg/ml

## Vial 2 (green top)

Biotinylated monoclonal antibody GB11 (80 µl)

Concentration: 1 mg/ml

## Vial 3 (white top)

Streptavidin-Alkaline Phosphatase (80 µl)

#### Vial 4

Granzyme B 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

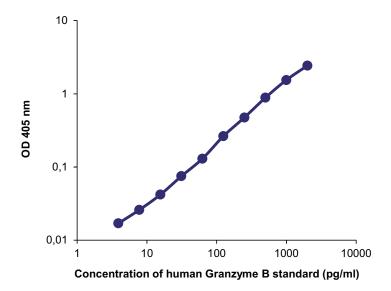
**Intended use:** For quantitative determination of human Granzyme B in solution, e.g. cell culture supernatant.

**Serum/plasma samples:** Please note that determination of analyte in human serum/plasma samples by this kit requires the use of ELISA diluent (product code: 3652-D2) for dilution of samples, standard and detection antibody. The diluent prevents false positive read-outs which may be caused by interference of heterophilic antibodies commonly found in human plasma and serum. The ELISA diluent 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.

**Reagents:** Antibodies are supplied in sterile-filtered (0.2  $\mu$ m) PBS with sodium azide (0.02%). Streptavidin-ALP is supplied in 0.1 M Tris buffer with 0.002% Kathon CG.

Standard range: 5-1000 pg/ml

**Standard calibration:** One vial of lyophilized, purified YT-supernatant contains 0.25 µg of human Granzyme B, estimated by comparison to purified reference Granzyme B. Calibration is batch-specific.



# Guidelines for Human Granzyme B ELISA

- **Day 1** 1. Coat a high protein binding ELISA plate with mAb GB10, 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.
  - 5. Prepare standard by reconstituting contents of vial 4 in 0.5 ml PBS. This gives a stock solution of 0.5 μg/ml which should be used immediately or stored in aliquots at -20°C for future use. We recommend the aliquots not to be refrozen after initial use. 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 ELISA diluent for serum/plasma samples and incubate for 2 hours at room temperature.
  - 7. Wash as in step 4.
  - 8. Add 100 μl/well of mAb GB11-biotin at 1 μg/ml in incubation buffer or ELISA diluent for serum/plasma samples. Incubate for 1 hour at room temperature.
  - 9. Wash as in step 4.
  - 10. Add 100 μl/well of Streptavidin-ALP diluted 1:1000 in incubation buffer. Incubate for 1 hour at room temperature.
  - 11. Wash as in step 4.
  - 12. Add 100 μl/well of appropriate substrate solution e.g. p-nitrophenyl-phosphate (pNPP), available from Mabtech product code 3652-P10.
  - 13. Measure the optical density (405 nm for pNPP) in an ELISA reader after suitable developing time.



Developed and manufactured by MABTECH AB, Sweden, whose quality management system complies with the standards ISO 9001:2015 & ISO 13485:2016.





#### The products are 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 there from.

Mabtech AB (Head Office)

Sweden Tel: +46 8 716 27 00 mabtech@mabtech.com Mabtech, Inc.

USA Tel: +1 513 871-4500 mabtech.usa@mabtech.com