ELISA for Human IL-4

Product Code: 3410-1H-20

CONTENTS, development kit for 20 plates:

Vial 1 (red top)

Monoclonal antibody IL4-I (250 µl)

Concentration: 1 mg/ml

Vial 2 (blue top)

Biotinylated monoclonal antibody IL4-II (250 μ l)

Concentration: 1 mg/ml

Vial 3 (white top)

Streptavidin-Horseradish Peroxidase (250 µl)

Vial 4

Recombinant human IL-4 standard (1 μg)

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 native and recombinant human IL-4 in solution, e.g. cell culture supernatant.

Serum/plasma samples: Please note that cytokine determinations in serum/plasma require 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 found in 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-HRP is supplied in PBS with 1% BSA and 0.15% Kathon CG.

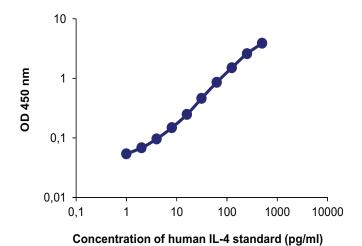
Standard range: 3-300 pg/ml

Limit of detection: 1 pg/ml

Intra-assay variation: < 5%

Standard calibration: 1 ng of supplied standard equals 14 U 88/656 NIBSC*-standard according to repeated calibrations. Calibration is batch-specific.

*National Institute of Biological Standards and Control, UK.



Guidelines for Human IL-4 ELISA

- **Day 1** 1. Coat a high protein binding ELISA plate with mAb IL4-I, diluted to 1 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 1% BSA. Incubate for 1 hour at room temperature.
 - 4. Wash five times with PBS containing 0.05% Tween20
 - 5. Prepare hIL-4 standard by reconstituting contents of vial 4 in 1 ml PBS to a concentration of 1 µg/ml. Leave at room temperature for 15 minutes and then vortex the tube. The stock solution should be used immediately or stored in aliquots at -20°C for future use. We recommend the aliquots not 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 (PBS-Tween containing 0.1% BSA) 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 IL4-II-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-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

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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