# Human IL-31 ELISA development kit

Product Code: 3530-1A-6

CONTENTS, development kit for 6 plates:

**Vial 1 (blue top)** Monoclonal antibodies MT31/88 (300 µl) Concentration: 0.5 mg/ml

**Vial 2 (green top)** Biotinylated monoclonal antibody MT158 (50 µl) Concentration: 0.5 mg/ml

**Vial 3 (white top)** Streptavidin-Alkaline Phosphatase (80 µl)

Vial 4 Recombinant human IL-31 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

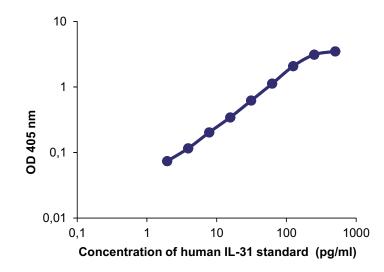
**Intended use:** For quantitative determination of native and recombinant human IL-31 in solution, e.g. cell culture supernatant and serum/plasma samples.

Serum/plasma samples: Please note that cytokine determinations in serum/plasma 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 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-ALP is supplied in 0.1 M Tris buffer with 0.002% Kathon CG.

Standard range: 3-300 pg/ml.

Standard calibration: No international standard exists for calibration.



## Guidelines for Human IL-31 ELISA

- **Day 1** 1. Coat a high protein binding ELISA plate with mAb MT31/88, diluted to  $2 \mu g/ml$  in PBS, pH 7.4, by adding 100  $\mu$ l/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 human IL-31 standard by reconstituting contents of vial 4 in 1 ml PBS to give a concentration of 1  $\mu$ g/ml. Leave at room temperature for 15 minutes, then vortex the tube and spin down. Use immediately or store 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 MT158-biotin at 0.25 μg/ml in incubation buffer or ELI-SA diluent for serum/plasma samples. Incubate for 1 hour at room temperature.
  - 9. Wash as in step 4.
  - 10. Add 100  $\mu$ l/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.

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