Datasheet & Protocol



ELISA Flex: <u>Hu</u>man IL-21 (ALP)

3540-1A-6 | 3540-1A-20

ELISA Flex kit for quantitative determination of native and recombinant human IL-21 in solution, e.g. cell supernatant.

The kit includes		3540-1A-6 for 6 plates	3540-1A-20 for 20 plates
Capture mAb:	MT216G (0.5 mg/ml)	300 μΙ	1000 μΙ
Detection mAb:	MT21.3m, biotin (0.5 mg/ml)	150 μΙ	500 μΙ
Streptavidin-ALP		80 μΙ	250 μΙ
Recombinant human IL-21 ELISA standard		1 vial	1 vial
Standard reconstitution buffer A8		1 ml	1 ml

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

Shipping and storage

Shipped at ambient temperature. All reagents should be stored at 4-8 °C upon receipt, except the standard which should be stored at -20 °C. Antibodies are supplied in sterile-filtered PBS with sodium azide (0.02%). Streptavidin-ALP is supplied in 0.1 M Tris buffer with 0.002% Kathon CG. The expiry date indicates how long unopened products, stored according to instructions, are recommended for use.

General and Preparations

Specificity

The kit contains a matched pair of monoclonal antibodies (mAbs) specific for native and recombinant human IL-21. The mAbs cross-react with IL-21 from non-human primates. Please visit www.mabtech.com for reactivity on NHP species.

Standard range

7-700 pg/ml

Calibration

No international standard exists for calibration.

Analysis of serum and plasma samples

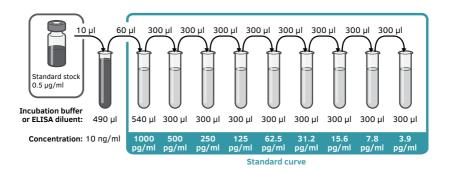
Analysis of serum/plasma requires the use of ELISA diluent (product code: 3652-D2). The ELISA diluent blocks heterophilic antibodies, commonly found in serum/plasma, from cross-linking the assay antibodies, thereby preventing false positive read-outs. The ELISA diluent should be used for dilution of standard, samples, and detection antibody.

Reconstitution of ELISA standard

Reconstitute the ELISA standard to a stock solution of 0.5 μ g/ml by adding 1 ml of the standard reconstitution buffer. Allow the standard to dissolve for 5 minutes and mix thoroughly. The standard should be kept in aliquots at -20 °C. Avoid repeated freeze-thaw cycles.

Preparation of standard curve

Prepare within 30 minutes of use. Volumes are sufficient for duplicates.



2 www.mabtech.com

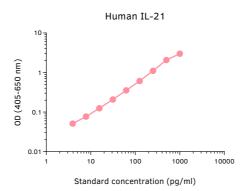
Protocol

Day 1

1. Add 100 µl/well of capture mAb MT216G diluted to 2 µg/ml in PBS, pH 7.4. Use high protein binding ELISA plates. Incubate overnight at 4-8 °C.

Day 2

- 2. Empty the plate and add 200 μl/well of PBS with 0.05% Tween 20 and 0.1% BSA (incubation buffer) to block the plate. Incubate for 1 hour at room temperature.
- 3. Wash the plate 5 times with PBS containing 0.05% Tween 20 (300 µl/well).
- **4.** Add 100 µl/well of samples or standards diluted in incubation buffer or ELISA diluent. Include assay background control, i.e. wells without standard. Incubate for 2 hours at room temperature.
- **5.** Wash as above.
- **6.** Add 100 µl/well of detection mAb MT21.3m-biotin diluted to 1 µg/ml in incubation buffer or ELISA diluent. Incubate for 1 hour at room temperature.
- **7.** Wash as above.
- **8.** Add 100 µl/well of Streptavidin-ALP diluted 1:1000 in incubation buffer. Incubate for 1 hour at room temperature.
- **9.** Wash as above.
- **10.** Add 100 μl/well of pNPP substrate (product code: 3652-P10) and incubate at room temperature protected from direct light for approximately 60 minutes.
- 11. Measure the optical density in an ELISA reader at 405 nm. Preferably use a reader capable of subtracting a reference wavelength of between 570 and 650 nm. Representative standard curve shown below.



3 www.mabtech.com



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





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