Anti-Human IL-15 Antibody [PSH04-20] - BSA and Azide free (Detector)

HA722103



Product Type: Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human

Applications: ELISA(Det)

Molecular Wt: Predicted band size: 18.1 kDa

Clone number: PSH04-20

Description: Interleukin-15 (IL-15) is a protein that in humans is encoded by the IL15 gene. IL-15 is an

inflammatory cytokine with structural similarity to Interleukin-2 (IL-2). Like IL-2, IL-15 binds to and signals through a complex composed of IL-2/IL-15 receptor beta chain (CD122) and the common gamma chain (gamma-C, CD132). IL-15 is secreted by mononuclear phagocytes (and some other cells) following infection by virus(es). This cytokine induces the proliferation of natural killer cells, i.e. cells of the innate immune system whose principal role

is to kill virally infected cells.

Immunogen: Recombinant protein within Human IL-15 aa 49-162 (P40933).

Positive control: Recombinant standard Human IL-15 protein (HA210773).

Subcellular location: Secreted; Nucleus.

Database links: SwissProt: P40933 Human

Recommended Dilutions:

ELISA(Det)

Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit

monoclonal [PSH04-19] to Human IL-15 (Caputure) (HA722102) and recombinant standard

Human IL-15 protein (HA210773). The reference range value is 12.3-1000pg/ml.

Storage Buffer: PBS (pH7.4).

Storage Instruction: Store at +4 $^{\circ}$ C after thawing. Aliquot store at -20 $^{\circ}$ C. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Technical:0086-571-89986345

Service mail:support@huabio.cn



Images

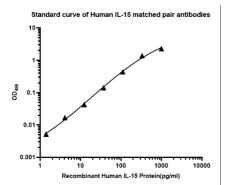


Fig1: Sandwich ELISA analysis of Human IL-15 matched pair antibodies

Elisa assay was performed by coating wells of a 96-well plate with 100 $\,\mu l$ per well of capture antibody (HA722102) diluted in carbonate/bicarbonate buffer, at a concentration of 5 $\,\mu g/m l$ overnight at $4\,^{\circ}\mathrm{C}$. Wells of the plate were washed, blocked with 150 $\,\mu l$ 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human IL-15 protein (HA210773) starting from 2000 $\,pg/m l$ to 0 $\,pg/m l$ and detect antibody (HA722103) (Biotin-conjugated, 0.2 $\,\mu g/m l$) for 1 hour at 30 $^{\circ}\mathrm{C}$ with shaking. Then the plate was washed and incubated with 100 $\,\mu l$ per well of SA-HRP for 0.5 hour at 30 $^{\circ}\mathrm{C}$ with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

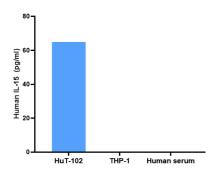


Fig2: The concentrations of IL-15 were interpolated from the IL-15 standard curves. The mean IL-15 concentration was determined to be 65 pg/mL in HuT-102 supernatant. There was no detectable signal in THP-1 supernatant and human serum.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- 1. Zannikou M et al. IL15 modification enables CAR T cells to act as a dual targeting agent against tumor cells and myeloid-derived suppressor cells in GBM. J Immunother Cancer. 2023 Feb
- 2. Xu Y et al. An Engineered IL15 Cytokine Mutein Fused to an Anti-PD1 Improves Intratumoral T-cell Function and Antitumor Immunity. Cancer Immunol Res. 2021 Oct