Anti-Human IL-7 Antibody [PSH03-10] - BSA and Azide free (Detector)

HA721938



Product Type: Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human

Applications: ELISA(Det)

Molecular Wt: Predicted band size: 20.2 kDa

Clone number: PSH03-10

Description: IL-7 (Interleukin-7) is a cytokine that plays important roles in lymphocyte differentiation,

proliferation, and survival. IL-7 is produced by stromal epithelial cells of the thymus, bone marrow, and intestines. It signals through a receptor complex composed of IL-7 R alpha/CD127 and the Common gamma Chain. gamma c is also a subunit of the receptors for IL-2, -4, -9, -15, and -21. IL-7 contributes to the maintenance of all naïve and memory T cells. It is required for optimal T cell-dendritic cell interaction. In mouse, IL-7 activation of IL-7 R alpha is critical for both T cell and B cell lineage development, while in humans, it is

required for T cell but not for B cell development.

Immunogen: Recombinant protein within human IL-7 aa 26-177.

Positive control: Recombinant Human Human IL-7 (HA210595).

Subcellular location: Secreted.

Database links: SwissProt: P13232 Human

Recommended Dilutions:

ELISA(Det)

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

monoclonal [PSH03-09] to Human Human IL-7 (Capture) (HA721937) and recombinant standard Human Human IL-7 (HA210595) as the standard. The reference range value is

8.2-2000 pg/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.

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Images

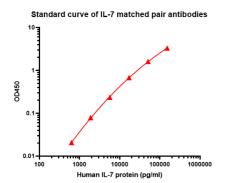


Fig1: Sandwich ELISA analysis of human IL-7 matched pair antibodies

Elisa assay was performed by coating wells of a 96-well plate with 100 $\,\mu l$ per well of capture antibody (HA721937) diluted in carbonate/bicarbonate buffer, at a concentration of 2 $\,\mu g/m L$ 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 IL-7 protein starting from 2000 pg/ml to 0 pg/ml and detect antibody (HA721938) -Biotin (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.

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

Background References

- 1. Bazdar D.A., Kalinowska M., Panigrahi S., Sieg S.F. Recycled IL-7 Can Be Delivered to Neighboring T Cells. J. Immunol. 194:4698-4704 (2015).
- 2. Kondo M., Takeshita T., Higuchi M., Nakamura M., Sudo T., Nishikawa S., Sugamura K. Functional participation of the IL-2 receptor gamma chain in IL-7 receptor complexes. Science 263:1453-1454 (1994).