

## Anti-Mouse IL-7 Antibody [PSH14-30] - BSA and Azide free (Detector)

# HA723622



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Mouse
<b>Applications:</b>	ELISA(Det)
<b>Clone number:</b>	PSH14-30

**Description:** Hematopoietic cytokine that plays an essential role in the development, expansion, and survival of naive and memory T-cells and B-cells thereby regulating the number of mature lymphocytes and maintaining lymphoid homeostasis. Mechanistically, exerts its biological effects through a receptor composed of IL7RA subunit and the cytokine receptor common subunit gamma/CSF2RG. Binding to the receptor leads to activation of various kinases including JAK1 or JAK3 depending on the cell type and subsequently propagation of signals through activation of several downstream signaling pathways including the PI3K/Akt/mTOR or the JAK-STAT5.

**Immunogen:** Recombinant protein within Mouse IL-7 aa 26-154 (HA211019).

**Positive control:** Recombinant Mouse IL-7 protein (HA211019).

**Subcellular location:** Secreted.

**Database links:** SwissProt: P10168 Mouse

### Recommended Dilutions:

**ELISA(Det)** Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH14-29] to Mouse IL-7 antibody (Capture) (HA723621) and Recombinant Mouse IL-7 protein (HA211019) as the standard. The reference range value is 15.6-2,000 pg/mL.

**Storage Buffer:** 1\*PBS (pH7.4).

**Storage Instruction:** Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

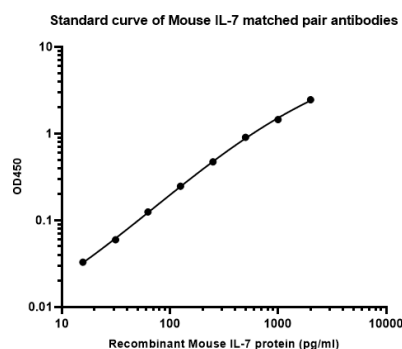
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## Images

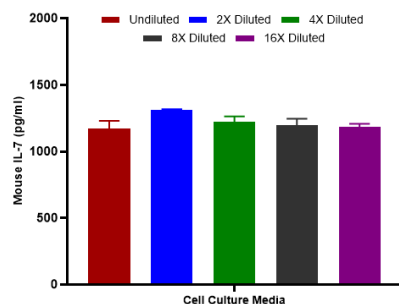
**Fig1:** Sandwich ELISA analysis of Mouse IL-7 matched pair antibodies

Capture: HA723621, Mouse IL-7 Rabbit mAb [PSH14-29]

Detector: HA723622, Mouse IL-7 Rabbit mAb [PSH14-30]



Elisa assay was performed by coating wells of a 96-well plate with 50  $\mu$ l per well of capture antibody (HA723621) diluted in carbonate/bicarbonate buffer, at a concentration of 2  $\mu$ g/ml overnight at 4°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 Mouse IL-7 protein (HA211019) starting from 2,000 pg/ml to 0 pg/ml and detect antibody (HA723622, Biotin, 0.2  $\mu$ g/ml) for 1 hour at 30°C with shaking. Then the plate was washed and incubated with 50  $\mu$ l per well of SA-HRP for 0.5 hour at 30°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:** Interpolated concentrations of spiked IL-7 in mouse cell culture media samples.

Capture: HA723621, Mouse IL-7 Rabbit mAb [PSH14-29]

Detector: HA723622, Mouse IL-7 Rabbit mAb [PSH14-30]

The concentrations of IL-7 were measured in duplicates, interpolated from the IL-7 standard curves and corrected for sample dilution. Undiluted samples are as follows: cell culture media 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).

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

## Background References

1. von Freeden-Jeffry U., Vieira P., Lucian L.A., McNeil T., Burdach S.E., Murray R. Lymphopenia in interleukin (IL)-7 gene-deleted mice identifies IL-7 as a nonredundant cytokine. *J. Exp. Med.* 181:1519-1526 (1995)
2. Plumb A.W., Sheikh A., Carlow D.A., Patton D.T., Ziltener H.J., Abraham N. Interleukin-7 in the transition of bone marrow progenitors to the thymus. *Immunol. Cell Biol.* 95:916-924 (2017)

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