

# Biotin Conjugated Anti-Human IL-21 Antibody [PSH02-49]

## HA601358B



<b>Product Type:</b>	Recombinant Mouse monoclonal IgG1, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	ELISA(Det)
<b>Molecular Wt:</b>	Predicted band size: 18.6 kDa
<b>Clone number:</b>	PSH02-49

**Description:** IL-21 (Interleukin-21) is member of the family of cytokines that utilize the common gamma chain as a receptor subunit. This subunit is also a component of the receptors for IL-2, IL-4, IL-7, IL-9, and IL-15. IL-21 is produced by activated T follicular helper cells (Tfh), Th17 cells, and NKT cells. It exerts its biological effects through a heterodimeric receptor complex of the common gamma chain and the IL-21-specific IL-21 R. IL-21 supports Tfh cell development, immunoglobulin affinity maturation, plasma cell differentiation, B cell memory responses, and the migration of dendritic cells to draining lymph nodes. It costimulates the activation, proliferation, and survival of CD8+ T cells and NKT cells and promotes Th17 cell polarization. It blocks the generation of regulatory T cells and their suppressive effects on CD4+ T cells. In addition, IL-21 suppresses cutaneous hypersensitivity reactions by limiting allergen-specific IgE production and mast cell degranulation.

**Conjugate:** Biotin-conjugated

**Immunogen:** Recombinant protein within Human IL-21 aa 25-162 (Q9HBE4).

**Positive control:** Recombinant Human IL-21 Protein (HA211070).

**Subcellular location:** Secreted.

**Database links:** SwissProt: Q9HBE4 Human

**Recommended Dilutions:**

**ELISA(Det)** Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Mouse monoclonal [PSH02-48] to Human IL-21 (Capture) (HA601195).

**Storage Buffer:** PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% ProClin300.

**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

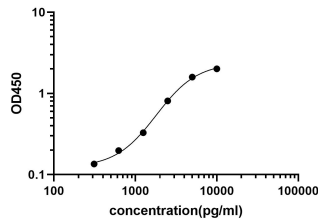
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## Images

**Fig1:** Sandwich ELISA analysis of Human IL-21 matched pair antibodies

Standard curve of human IL-21 matched pair antibodies



Elisa assay was performed by coating wells of a 96-well plate with 100  $\mu$ l per well of capture antibody (HA601195) diluted in carbonate/bicarbonate buffer, at a concentration of 5  $\mu$ g/ml overnight at 4 $^{\circ}$ 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-21 (HA211070) starting from 10,000 pg/ml to 0 pg/ml and detect antibody (HA601358B, 0.2  $\mu$ g/ml) for 1 hour at 30 $^{\circ}$ 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 $^{\circ}$ 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. Parrish-Novak J., Dillon S.R., Nelson A., Hammond A., Sprecher C., Gross J.A., Johnston J., Interleukin 21 and its receptor are involved in NK cell expansion and regulation of lymphocyte function. *Nature* 408:57-63 (2000)
2. Strengell M., Julkunen I., Matikainen S. IFN-alpha regulates IL-21 and IL-21R expression in human NK and T cells. *J. Leukoc. Biol.* 76:416-422 (2004)

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