Biotin Conjugated Anti-Mouse IL-9 Antibody [PS01-82] - Detector

HA721605

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse
Applications:	ELISA(Det), ELISA
Clone number:	PS01-82

Description: Multifunctional cytokine secreted mainly by T-helper 2 lymphocytes and also mast cells or NKT cells that plays important roles in the immune response against parasites. Affects intestinal epithelial permeability and adaptive immunity. In addition, induces the differentiation of specific T-cell subsets such as IL-17 producing helper T-cells (TH17) and also proliferation and differentiation of mast cells. Mechanistically, exerts its biological effects through a receptor composed of IL9R subunit and a signal transducing subunit IL2RG. Receptor stimulation results in the rapid activation of JAK1 and JAK3 kinase activities leading to STAT1, STAT3 and STAT5-mediated transcriptional programs. Induction of differentiation genes seems to be mediated by STAT1 alone, while protection of cells from apoptosis depends on STAT3 and STAT5.

Conjugate: Biotin-conjugated

Immunogen: Recombinant protein within mouse IL-9 aa 19-144 (HA210631).

Positive control: Recombinant Mouse IL-9 protein (HA210631).

Subcellular location: Secreted.

Database links:
SwissProt: P15247 Mouse
Entrez Gene: 16198 Mouse
Unigene: 3006 Mouse

Recommended Dilutions:

ELISA(Det) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PS01-81] to Mouse IL-9 antibody (Capture) (HA721603) and Recombinant Mouse IL-9 protein (HA210631) as the standard. The reference range value is 7.81-1,000 pg/mL.

ELISA Use at an assay dependent concentration.

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

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

Purity: Protein A affinity purified.

Images

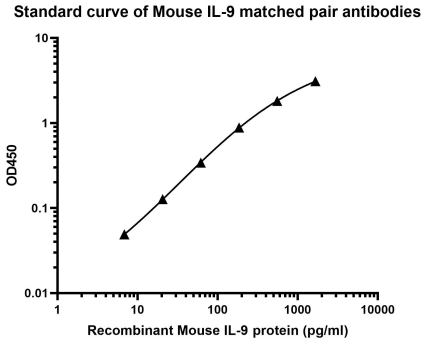

Fig1: Sandwich ELISA analysis of Mouse IL-9 matched pair antibodies

Capture: HA721603, Mouse IL-9 Rabbit mAb [PS01-81]
Detector: HA721604, Mouse IL-9 Rabbit mAb [PS01-82]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA721603) diluted in carbonate/bicarbonate buffer, at a concentration of 2 µg/mL overnight at 4℃. Wells of the plate were washed, blocked with 150 µl 0.05% tween-20 1%BSA blocking buffer, and incubated with serial diluted Recombinant Mouse IL-9 protein (HA210631) starting from 800 pg/ml to 0 pg/ml and detect antibody (HA721604, Biotin, 0.2 µg/ml) for 1 hour at 30℃ with shaking. Then the plate was washed and incubated with 100 µl per well of SA-HRP for 0.5 hour at 30℃ 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.

Background References

1. Townsend J.M., Fallon G.P., Matthews J.D., Smith P., Jolin E.H., McKenzie N.A. IL-9-deficient mice establish fundamental roles for IL-9 in pulmonary mastocytosis and goblet cell hyperplasia but not T cell development. Immunity 13:573-583 (2000).
2. Demoulin J.B., Van Roost E., Stevens M., Groner B., Renauld J.C. Distinct roles for STAT1, STAT3, and STAT5 in differentiation gene induction and apoptosis inhibition by interleukin-9. J. Biol. Chem. 274:25855-25861 (1999).