Anti-Mouse CXCL9 Antibody [PSH12-62] - BSA and Azide free (Capture)

HA725022

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse
Applications:	ELISA(Cap)
Clone number:	PSH12-62

Description: This antimicrobial gene is part of a chemokine superfamily that encodes secreted proteins involved in immunoregulatory and inflammatory processes. The protein encoded is thought to be involved in T cell trafficking. The encoded protein binds to C-X-C motif chemokine 3 and is a chemoattractant for lymphocytes but not for neutrophils. Cytokine that affects the growth, movement, or activation state of cells that participate in immune and inflammatory response. Chemotactic for activated T-cells. Binds to CXCR3.

Immunogen: Recombinant protein within Mosue CXCL9 aa 22-126 (HA211031).

Positive control: Recombinant Mouse CXCL9 protein (HA211031).

Subcellular location: Secreted.

Database links: SwissProt: P18340 Mouse

Recommended Dilutions:

ELISA(Cap) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH12-63] to Mouse CXCL9 antibody (Detector) (HA725023) and Recombinant Mouse CXCL9 protein (HA211013) as the standard. The reference range value is 15.6-2,000 pg/mL.

Storage Buffer: PBS (pH7.4).

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

Purity: Protein A affinity purified.

Images

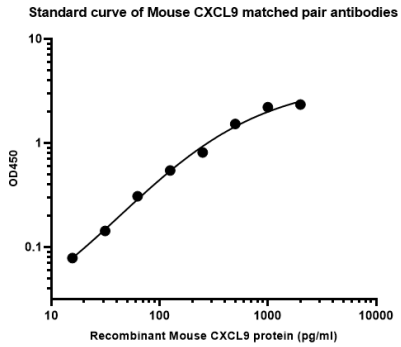

Fig1: Sandwich ELISA analysis of mouse CXCL9 matched pair antibodies

Capture: HA725022, Mouse CXCL9 Rabbit mAb [PSH12-62]
Detector: HA725023, Mouse CXCL9 Rabbit mAb [PSH12-63]

Elisa assay was performed by coating wells of a 96-well plate with 50 µl per well of capture antibody (HA725022) 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 CXCL9 protein (HA211031) starting from 2,000 pg/ml to 0 pg/ml and detect antibody (HA725023, Biotin, 0.2 µg/ml) for 1 hour at 30℃ with shaking. Then the plate was washed and incubated with 50 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.

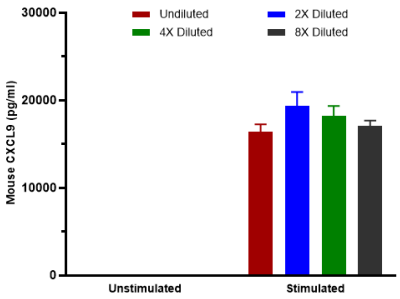

Fig2: Interpolated concentrations of native CXCL9 in unstimulated and stimulated J774A.1 cell culture supernatant.

Capture: HA725022, Mouse CXCL9 Rabbit mAb [PSH12-62]
Detector: HA725023, Mouse CXCL9 Rabbit mAb [PSH12-63]

J774A.1 cells were stimulated with 20 ng/ml recombinant mouse IFN-γ and 1 µg/ml LPS incubated for 1 day. The concentrations of CXCL9 measured in duplicate and interpolated from the CXCL9 standard curve and corrected for sample dilution. Undiluted samples are as follows: unstimulated 100% and stimulated 1.6%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CXCL9 concentration was determined to be 17,738 pg/ml in IFN-γ and LPS stimulated J774A.1 cell culture supernatant and undetectable in the unstimulated J774A.1 control.

Background References

1. Kersh A.E., Sati S., Huang J., Murphy C., Ahart O., Leung T.H. CXCL9, CXCL10, and CCL19 synergistically recruit T lymphocytes to skin in lichen planus. JCI Insight 9:e179899-e179899 (2024)
2. Larkin R.M., Lopez D.C., Robbins Y.L., Lassoued W., Canubas K., Warner A., Karim B., Vulikh K., Hodge J.W., London N.R. Jr. Augmentation of tumor expression of HLA-DR, CXCL9, and CXCL10 may improve olfactory neuroblastoma immunotherapeutic responses. J Transl Med 22:524-524 (2024)