Anti-Mouse CXCL16 Antibody [PSH17-71] - BSA and Azide free (Capture)

HA723940

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse
Applications:	ELISA(Cap)
Clone number:	PSH17-71

Description: Chemokine (C-X-C motif) ligand 16 (CXCL16) is a small cytokine belonging to the CXC chemokine family. Larger than other chemokines (with 254 amino acids), CXCL16 is composed of a CXC chemokine domain, a mucin-like stalk, a transmembrane domain and a cytoplasmic tail containing a potential tyrosine phosphorylation site that may bind SH2. These are unusual features for a chemokine, allowing CXCL16 to be expressed as a cell surface bound molecule, as well as a soluble chemokine. CXCL16 is produced by dendritic cells found in the T cell zones of lymphoid organs, and by cells found in the red pulp of the spleen. Cells that bind and migrate in response to CXCL16 include several subsets of T cells, and natural killer T (NKT) cells. CXCL16 interacts with the chemokine receptor CXCR6, also known as Bonzo. Expression of CXCL16 is induced by the inflammatory cytokines IFN-gamma and TNF-alpha.

Immunogen: Recombinant protein within Mouse CXCL16 aa 27-201 (HA211059).

Positive control: Recombinant Mouse CXCL16 protein (HA211059).

Subcellular location: Membrane.

Database links: SwissProt: Q8BSU2 Mouse

Recommended Dilutions:

ELISA(Cap) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH17-72] to Mouse CXCL16 antibody (Detector) (HA723941) and Recombinant Mouse CXCL16 protein (HA211059) as the standard. The reference range value is 15.6-4,000 pg/mL.

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

Storage Instruction: Store at 2-8℃. Avoid freeze.

Purity: Protein A affinity purified.

Images

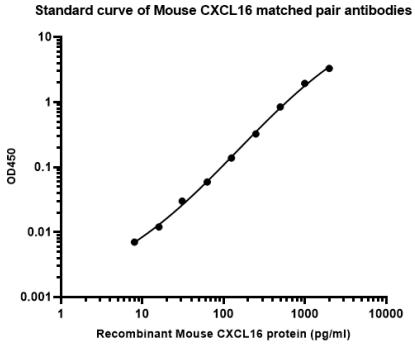


Fig1: Sandwich ELISA analysis of Mouse CXCL16 matched pair antibodies

Capture: HA723940, Mouse CXCL16 Rabbit mAb [PSH17-71]
Detector: HA723941, Mouse CXCL16 Rabbit mAb [PSH17-72]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA723940) diluted in carbonate/bicarbonate buffer, at a concentration of 2ug/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 CXCL16 protein (HA211059) starting from 4000 pg/ml to 0 pg/ml and detect antibody (HA723941, 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.

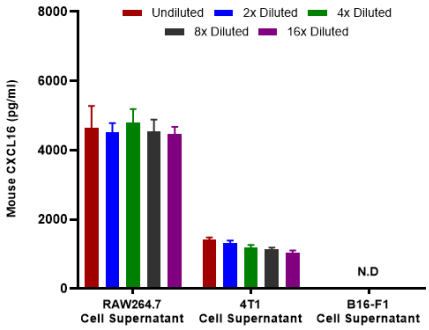


Fig2: Interpolated concentrations of native CXCL16 in mouse samples.

Capture: HA723940, Mouse CXCL16 Rabbit mAb [PSH17-71]
Detector: HA723941, Mouse CXCL16 Rabbit mAb [PSH17-72]

Interpolated concentration of native CXCL16 was measured in duplicate at different sample concentrations. The interpolated dilution factor corrected values were plotted (mean +/- SD, n=2). The mean CXCL16 concentration was determined to be 4,600 pg/mL in RAW264.7 cell supernatant and 1,220 pg/ml in 4T1 cell supernatant. There was no detectable signal in B16-F1 cell culture supernatant.

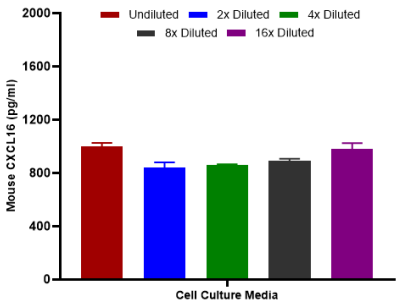


Fig3: Interpolated concentrations of spiked CXCL16 in cell culture media samples.

Capture: HA723940, Mouse CXCL16 Rabbit mAb [PSH17-71]
Detector: HA723941, Mouse CXCL16 Rabbit mAb [PSH17-72]

The concentrations of CXCL16 were measured in duplicates, interpolated from the CXCL16 standard curves and corrected for sample dilution. Diluted samples are as follows: 50% cell culture media with FBS. 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. Korbecki J et al. The Role of CXCL16 in the Pathogenesis of Cancer and Other Diseases. Int J Mol Sci. 2021 Mar
2. Bao N et al. Role of the CXCR6/CXCL16 axis in autoimmune diseases. Int Immunopharmacol. 2023 Aug