Anti-Mouse IFN beta Antibody [PSH04-72] - BSA and Azide free (Capture)

HA722172

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse
Applications:	ELISA(Cap)
Clone number:	PSH04-72

Description: This gene encodes a cytokine that belongs to the interferon family of signaling proteins, which are released as part of the innate immune response to pathogens. The protein encoded by this gene belongs to the type I class of interferons, which are important for defense against viral infections. In addition, type I interferons are involved in cell differentiation and anti-tumor defenses. Following secretion in response to a pathogen, type I interferons bind a homologous receptor complex and induce transcription of genes such as those encoding inflammatory cytokines and chemokines. Overactivation of type I interferon secretion is linked to autoimmune diseases. Mice deficient for this gene display several phenotypes including defects in B cell maturation and increased susceptibility to viral infection.

Immunogen: Recombinant protein within Mouse IFN beta aa 22-182 (P01575).

Positive control: Recombinant Mouse IFN beta protein (HA210789).

Subcellular location: Secreted.

Database links: SwissProt: P01575 Mouse

Recommended Dilutions:

ELISA(Cap) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH04-73] to Mouse IFN beta antibody (Detector) (HA722173) and Recombinant Mouse IFN beta protein (HA210789) as the standard. The reference range value is 62.5-2,000 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

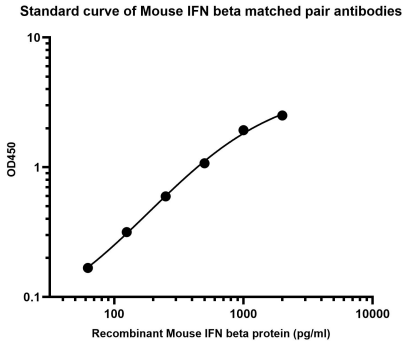

Fig1: Sandwich ELISA analysis of Mouse IFN beta matched pair antibodies

Capture: HA722172, Mouse IFN beta Rabbit mAb [PSH04-72]
Detector: HA722173, Mouse IFN beta Rabbit mAb [PSH04-73]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA722172) 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 Recombinant Mouse IFN beta protein (HA210789) starting from 2,000 pg/ml to 0 pg/ml and detect antibody (HA722173, 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. Tresse E et al. IFN-β rescues neurodegeneration by regulating mitochondrial fission via STAT5, PGAM5, and Drp1. EMBO J. 2021 Jun
2. Ko R et al. Pim1 promotes IFN-β production by interacting with IRF3. Exp Mol Med. 2022 Nov