Biotin Conjugated Anti-Mouse IL-33 Antibody [PSH08-42] - Detector

HA722987B

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse
Applications:	ELISA(Det), ELISA
Clone number:	PSH08-42

Description: Cytokine that binds to and signals through the IL1RL1/ST2 receptor which in turn activates NF-kappa-B and MAPK signaling pathways in target cells. Involved in the maturation of Th2 cells inducing the secretion of T-helper type 2-associated cytokines. Also involved in activation of mast cells, basophils, eosinophils and natural killer cells. Acts as an enhancer of polarization of alternatively activated macrophages. Acts as a chemoattractant for Th2 cells, and may function as an 'alarmin', that amplifies immune responses during tissue injury. Induces rapid UCP2-dependent mitochondrial rewiring that attenuates the generation of reactive oxygen species and preserves the integrity of Krebs cycle required for persistent production of itaconate and subsequent GATA3-dependent differentiation of inflammation-resolving alternatively activated macrophages. In quiescent endothelia the uncleaved form is constitutively and abundantly expressed, and acts as a chromatin-associated nuclear factor with transcriptional repressor properties, it may sequester nuclear NF-kappaB/RELA, lowering expression of its targets.

Conjugate: Biotin-conjugated

Immunogen: Recombinant protein within Mouse IL-33 aa 109-266 (HA210768).

Positive control: Recombinant Mouse IL-33 protein (HA210768).

Subcellular location: Nucleus. Chromosome. Cytoplasmic vesicle, secretory vesicle. Secreted.

Database links: SwissProt: Q8BVZ5 Mouse

Recommended Dilutions:

ELISA(Det)
ELISA Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH08-41] to Mouse IL-33 antibody (Capture) (HA722985) and recombinant Mouse IL-33 protein (HA210768) as the standard. The reference range value is 15.6-2,000 pg/mL.
Use at an assay dependent concentration.

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

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

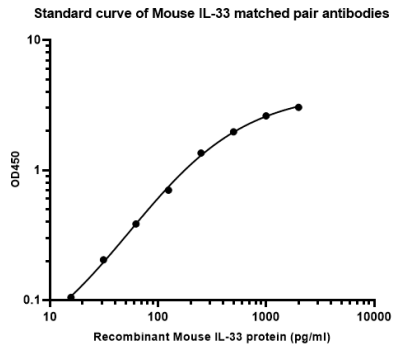

Fig1: Sandwich ELISA analysis of mouse IL-33 matched pair antibodies

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA722985) 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 IL-33 protein (HA210768) starting from 2000 pg/ml to 0 pg/ml and detect antibody (HA722987B, 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.

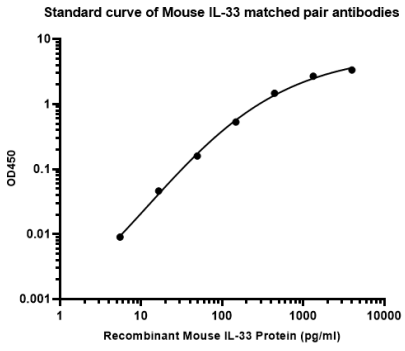

Fig2: Sandwich ELISA analysis of mouse IL-33 matched pair antibodies

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA722985) 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 IL-33 protein (HA210768) starting from 4000 pg/ml to 0 pg/ml and detect antibody (HA722987B, 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. Faas M., Ipseiz N., Ackermann J., Culemann S., Grueneboom A., Schroeder F., Rothe T. IL-33-induced metabolic reprogramming controls the differentiation of alternatively activated macrophages and the resolution of inflammation. Immunity 54:2531-2546.e5 (2021)
2. Osbourn M., Soares D.C., Vacca F., Cohen E.S., Scott I.C., Gregory W.F., Smyth D.J. HpARI Protein Secreted by a Helminth Parasite Suppresses Interleukin-33. Immunity 47:739-751 (2017)