Anti-Mouse IL-10 Antibody [PS01-85] - BSA and Azide free (Capture)

HA721517

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse
Applications:	ELISA(Cap)
Clone number:	PS01-85

Description:

IL-10 is a cytokine with multiple, pleiotropic, effects in immunoregulation and inflammation. It downregulates the expression of Th1 cytokines, MHC class II antigens, and co-stimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. IL-10 can block NF-κB activity, and is involved in the regulation of the JAK-STAT signaling pathway. Over time a more nuanced picture of IL-10's function has emerged as treatment of tumor bearing mice has been shown to inhibit tumor metastasis. Additional investigation by multiple laboratories has generated data that further supports IL-10's immunostimulatory capacity in an immunoncology context. Expression of IL-10 from transfected tumor cell lines in IL-10 transgenic mice[30] or dosing with IL-10 leads to control of primary tumor growth and decreased metastatic burden. More recently, PEGylated recombinant murine IL-10 (PEG-rMuIL-10) has been shown to induce IFNγ and CD8+ T cell dependent anti-tumor immunity. More specifically, PEGylated recombinant human IL-10 (PEG-rHuIL-10) has been shown to enhance CD8+ T cell secretion of the cytotoxic molecules Granzyme B and Perforin and potentiate T cell receptor dependent IFNγ secretion. A study in mice has shown that IL-10 is also produced by mast cells, counteracting the inflammatory effect that these cells have at the site of an allergic reaction.

Immunogen: Recombinant full length mouse il-10 protein.

Subcellular location: Secreted.

Database links: SwissProt: P18893 Mouse

Recommended Dilutions:

ELISA(Cap)   Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PS01-93] to Mouse IL-10 (Detector) (HA721518). The reference range value is 13.72-10,000 pg/ml.

Storage Buffer: PBS (pH7.4).

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

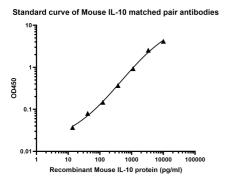**Purity:**   Protein A affinity purified.

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

Standard curve of Mouse IL-10 matched pair antibodies

Fig1: Sandwich ELISA analysis of Mouse IL-10 matched pair antibodies

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA721517) 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 standard Mouse IL-10 protein starting from 800 pg/ml to 0 pg/ml and detect antibody (HA721518, 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.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Cai W et al. Neuroprotection against ischemic stroke requires a specific class of early responder T cells in mice. J Clin Invest. 2022 Aug

2. Yang L et al. Depression-like behavior associated with E/I imbalance of mPFC and amygdala without TRPC channels in mice of knockout IL-10 from microglia. Brain Behav Immun. 2021 Oct