Mouse IL-10, C-His, Flag Tag Protein

HA210569

Product name:	Mouse IL-10, C-His, Flag Tag
Species reactivity:	Mouse
Bio-Activity:	Testing in progress.
Protein construction description:	A DNA sequence encoding the mouse IL-10 protein (P18893) (Ser 19-Ser 178) was expressed with both His, Flag tag at the C-terminus.

Background: 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.

Purity:	>90% as determined by SDS-PAGE.
Endotoxin:	Less than 1.0 EU per μg by the LAL method.
Fragment region:	IL-10 (19-178)
Source:	HEK293
Accession:	P18893
Predicted molecular mass:	21.4 kD
Formulation:	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution:	Reconstitute at 250 μg/ml in sterile water.
Storage:	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20℃ to -80℃ It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.

Images

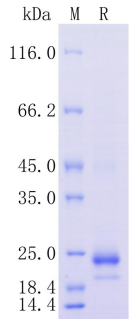

Fig1: Protein on SDS-PAGE under reducing (R) condition.

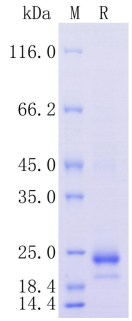

Fig2: Protein on SDS-PAGE under reducing (R) condition.

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