Recombinant Mouse interleukin 4 Protein, His&Flag tagged

Cat. No. Il4-144M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant mouse IL-4 protein (P07750) (His 21-Ser 140) with both His, Flag tag at the C-terminus was expressed in HEK293.
Species	Mouse
Source	HEK293
ProteinLength	21-140aa
Description	Cytokine secreted primarily by mast cells, T-cells, eosinophils, and basophils that plays a role in regulating antibody production, hematopoiesis and inflammation, and the development of effector T-cell responses. Induces the expression of class II MHC molecules on resting B-cells. Enhances both secretion and cell surface expression of IgE and IgG1, Regulates also the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. Positively regulates IL31RA expression in macrophages. Stimulates autophagy in dendritic cells by interfering with mTORC1 signaling and through the induction of RUFY4. In addition, plays a critical role in higher functions of the normal brain, such as memory and learning. Upon binding to IL4, IL4R receptor dimerizes either with the common IL2R gamma chain/IL2RG to produce the type 1 signaling complex, located mainly on hematopoietic cells, or with the IL13RA1 to produce the type 2 complex, which is expressed also on nonhematopoietic cells. Engagement of both types of receptors initiates JAK3 and to a lower extend JAK1 phosphorylation leading to activation of the signal transducer and activator of transcription 6/STAT6.

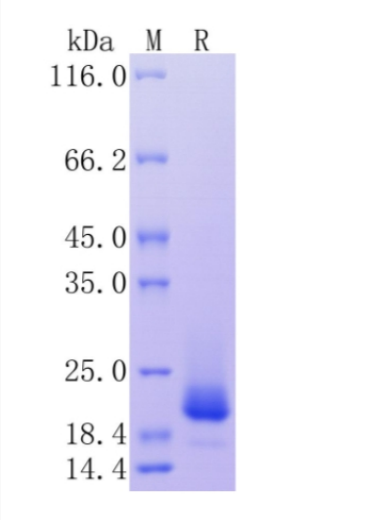
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Tag	C-His&Flag
Molecular Mass	16.2 kDa
Endotoxin	Less than 1.0 EU/μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage Buffer	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.

GENE INFORMATION

Gene Name	Il4 interleukin 4 [Mus musculus (house mouse)]
Official Symbol	Il4
Synonyms	IL4; interleukin 4; interleukin-4; IGG1 induction factor; B-cell growth factor 1; B-cell stimulatory factor 1; lymphocyte stimulatory factor 1; B-cell IgG differentiation factor; Il-4; BSF-1;
Gene ID	16189
mRNA Refseq	NM_021283

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Protein Refseq	NP_067258
UniProt ID	P07750
Protein on SDS-PAGE under reducing (R) condition.	

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