

Recombinant Mouse IL-4 (C-6His)

Catalog No.: RP0036

Basic Information

Information

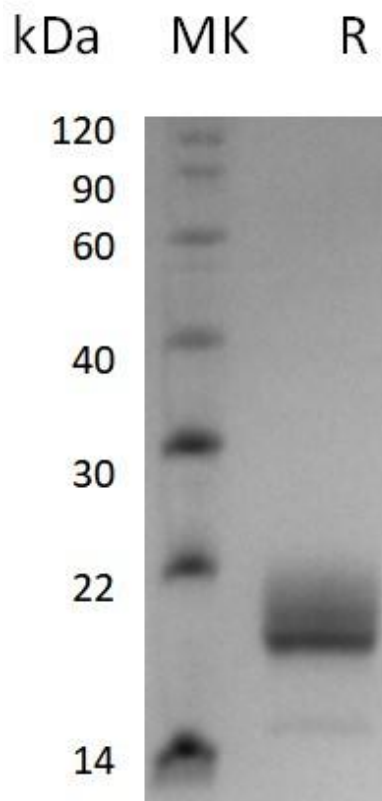
Source	<i>Human Cells</i>
Description	Recombinant Mouse Interleukin-4 is produced by our Mammalian expression system and the target gene encoding His21-Ser140 is expressed with a 6His tag at the C-terminus.
Accession	P07750
Known As	Interleukin-4; IL-4; IL4; B-cell IgG differentiation factor; B-cell growth factor 1; B-cell stimulatory factor 1; BSF-1; IGG1 induction factor; Lymphocyte stimulatory factor 1
Predicted Mol Mass	14.6 KDa
Apparent Mol Mass	15-19 KDa, reducing conditions

Properties

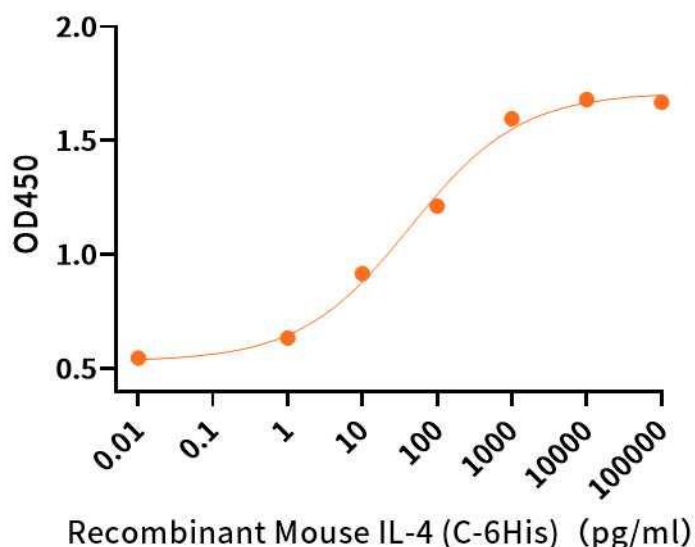
Formulation	Lyophilized from a 0.2 μ m filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
Storage	Lyophilized protein should be stored at $\leq -20^{\circ}\text{C}$, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8 $^{\circ}\text{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $\leq -20^{\circ}\text{C}$ for 3 months.
Endotoxin	$< 1 \text{ EU}/\mu\text{g}$ as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{ml}$. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

Experimental Data

Purity-SDS-PAGE



Bioactivity-Cell Based Assay



Greater than 95% as Measured in a cell proliferation assay using M-NFS-60 mouse determined by reducing lymphoblast cells. The ED50 for this effect is 0.035 ng/ml. SDS-PAGE. (QC verified) (Regularly tested)

Background

Interleukin-4 (IL-4) is a pleiotropic cytokine that regulates diverse T and B cell responses including cell proliferation, survival and gene expression. IL-4 is produced by mast cells, T cells, and bone marrow stromal cells. IL-4 regulates the differentiation of naive CD4⁺ T cells into helper Th2 cells, characterized by their cytokine-secretion profile that includes secretion of IL-4, IL-5, IL-6, IL-10, and IL-13, which favor a humoral immune response. Another dominant function of IL-4 is the regulation of immunoglobulin class switching to the IgG1 and IgE isotypes. Excessive IL-4 production by Th2 cells has been associated with elevated IgE production and allergic response.