Recombinant Mouse IL-4

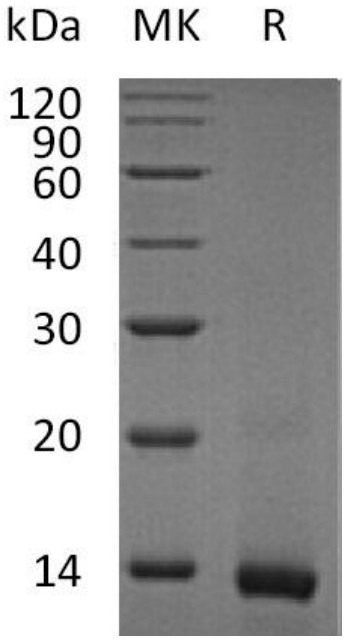
Catalog No.: RP0026

Basic Information

Information	
Source	*E.coli*
Description	Recombinant Mouse Interleukin-4 is produced by our E.coli expression system and the target gene encoding His23-Ser140 is expressed.
Accession	P07750
Known As	Interleukin-4; B-cell IgG differentiation factor; B-cell growth factor 1; B-cell stimulatory factor 1; IGG1 induction factor; Lymphocyte stimulatory factor 1; IL-4; BSF-1
Predicted Mol Mass	13.4 KDa
Apparent Mol Mass	14 KDa, reducing conditions
Properties	
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM PB,5% Sucrose,4% Mannitol,0.1% PS-80，pH 6.5.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 1 EU/μg 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 100μg/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.

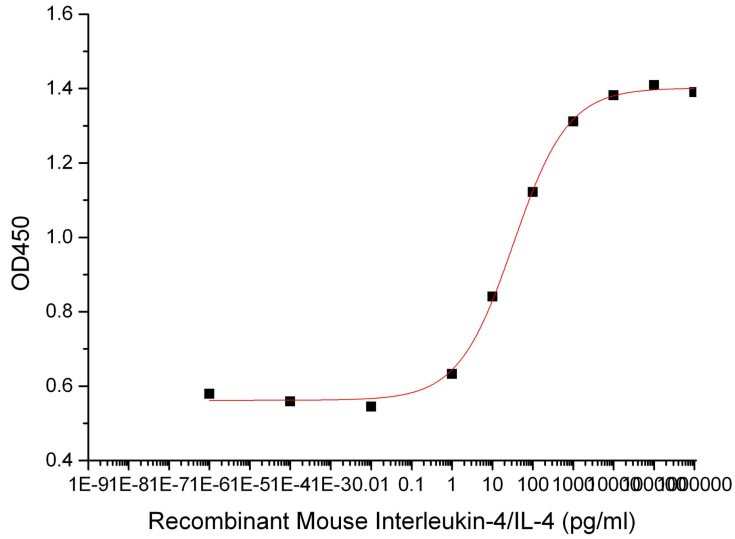
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



Measured in a cell proliferation assay using M-NFS-60 mouse lymphoblast cells. The ED50 for this effect is 0.01 ng/ml. (Regularly tested)

Background

Mouse Interleukin-4(IL-4) is a monomeric, Th2 cytokine that shows pleiotropic effects during immune responses. It is a glycosylated polypeptide that contains three intrachain disulfide bridges and adopts a bundled four α-helix structure. IL-4 exerts its effects through two receptor complexes, Participates in at least several B-cell activation processes as well as of other cell types. IL-4 is primarily expressed by Th2-biased CD4+T cells, mast cells, basophils, and eosinophils. It promotes cell proliferation, survival, and immunoglobulin class switch to IgG1 and IgE in mouse B cells, acquisition of the Th2 phenotype by naïve CD4+T cells, priming and chemotaxis of mast cells, eosinophils, and basophils, and the proliferation and activation of epithelial cells. IL-4 plays a dominant role in the development of allergic inflammation and asthma. It also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes.