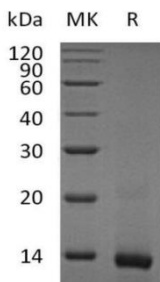
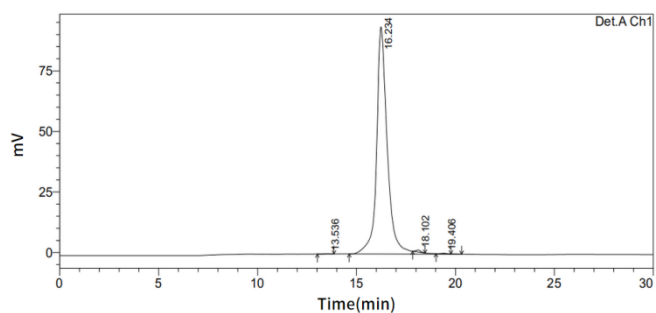


Recombinant Mouse IL-4

Catalog #:P00196 Derived from *E.coli*

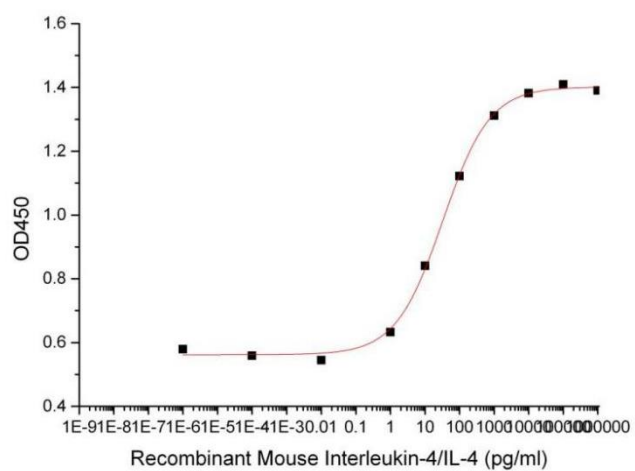
DESCRIPTION	<p>Recombinant Mouse Interleukin-4 is produced by our E.coli expression system and the target gene encoding His23-Ser140 is expressed.</p> <p>Accession#: P07750</p> <p>Known as: Interleukin-4; B-cell IgG differentiation factor; B-cell growth factor 1; B-cell stimulatory factor 1; IGG1 induction factor; Lymphocyte stimulatory factor 1; IL-4; BSF-1</p>
FORMULATION	Lyophilized from a 0.2 μm filtered solution of 20mM PB,5% Sucrose,4% Mannitol,0.1% PS-80, pH 6.5.
SHIPPING	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
STORAGE	<p>Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt.</p> <p>Reconstituted protein solution can be stored at 2-8°C for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.</p>
RECONSTITUTION	<p><i>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</i></p> <p><i>It is not recommended to reconstitute to a concentration less than 100μg/mL.</i></p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
QUALITY CONTROL	<p>Mol Mass: 13.4 kDa; AP Mol Mass: 14 kDa, reducing conditions.</p> <p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: < 1 EU/μg as determined by LAL test.</p>
BACKGROUND	<p>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.</p>
SDS-PAGE	 <p>kDa MK R</p> <p>120</p> <p>90</p> <p>60</p> <p>40</p> <p>30</p> <p>20</p> <p>14</p>

Purity-SEC-HPLC:



Greater than 95% as determined by SEC-HPLC.

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.