



Recombinant Mouse IL-4

Catalog #	EPT035
Expression Host	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
Synonyms	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
Mol Mass	13.4 KDa
AP Mol Mass	14 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.001 ng/μg (0.01 EU/μg) as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μm filtered solution of 20mM PB, 300mM NaCl, 5% Trehalose, pH 6.5.





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 μ g/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.

STORAGE

Lyophilized protein should be stored at $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ for 3 months.

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.

SDS-PAGE

