

Recombinant Mouse Interleukin-4/IL-4 Protein

Catalog No. PKSM041095

Note: Centrifuge before opening to ensure complete recovery of vial contents.

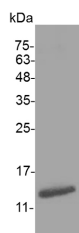
Description

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
Species	Mouse
Expression Host	E.coli
Sequence	His 21-Ser 140
Accession	P07750
Calculated Molecular Weight	14.5 kDa
Observed molecular weight	14 kDa
Tag	C-His

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 98 % as determined by reducing SDS-PAGE.

Background

Mouse Interleukin-4(IL-4) is a monomeric, Th2 cytokine that shows pleiotropic effects during immune responses. It is a

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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 na?ve 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.