



Recombinant Protein Technical Manual

Recombinant Mouse Interleukin-4/IL-4 Protein

RPES1983

Product Data:

Product SKU: RPES1983

Size: 10µg

Species: Mouse

Expression host: E. coli

Uniprot: P07750

Protein Information:

Molecular Mass: 13.4 kDa

AP Molecular Mass: 14 kDa

Tag:

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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 a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

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

Immunogen Information:

Sequence: His23-Ser140

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 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.