Recombinant mouse IL4

Catalog No: #AG0037

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Description

Product Name	Recombinant mouse IL4
Host Species	HEK293
Purification	> 95% by Tris-Bis PAGE;> 95% by SEC-HPLC
Immunogen Description	His21-Ser140
Target Name	IL4
Other Names	Mouse B cell growth factor 1; BCDF; B-cell stimulatory factor 1; BCGF1; BCGF-1; binetrakin; BSF1; BSF-1; IL4; IL-4; IL-4B_cell stimulatory factor 1; IL4E12; interleukin 4; interleukin-4; Lymphocyte stimulatory factor 1; MGC79402; pitrakinra
Accession No.	Uniprot:P07750Gene ID:16189
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GeneID	16189
Target Species	mouse
Calculated MW	13.6 KDa
Tag Info	addtional amino acid free
Formulation	0.22 μm filtered solution of PBS, pH 7.4.
Storage	Aliquot and store at -80°C. Avoid repeated freeze/thaw cycles.

Background

Interleukin-4 (IL-4), also known as B cell-stimulatory factor-1, is a monomeric, approximately 13 kDa-18 kDa Th2 cytokine that shows pleiotropic effects during immune responses (1-4). It is a glycosylated polypeptide that contains three intrachain disulfide bridges and adopts a bundled four alpha -helix structure (5). Mouse IL-4 is synthesized with a 24 aa signal sequence. Mature mouse IL-4 shares 39%, 39%, and 59% aa sequence identity with bovine, human, and rat IL-4, respectively. Human, mouse, and rat IL-4 are species-specific in their activities (6-8). IL-4 exerts its effects through two receptor complexes (9, 10). The type I receptor, which is expressed on hematopoietic cells, is a heterodimer of the ligand binding IL-4 R alpha and the common gamma chain (a shared subunit of the receptors for IL-2, -7, -9, -15, and
-21). The type II receptor on nonhematopoietic cells consists of IL?4 R alpha and IL?13 R alpha 1. The type II receptor also transduces IL?13 mediated signals. IL-4 is primarily expressed by Th2?biased CD4+ T cells, mast cells, basophils, and eosinophils (1, 2). 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 (11 ? 14). IL-4 plays a dominant role in the development of allergic inflammation and asthma (13, 15).

Note: This product is for in vitro research use only