

Datasheet for ABIN1589638 IL-4 Protein



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Overview

Quantity:	2 µg
Target:	IL-4 (IL4)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Purpose:	IL-4
Sequence:	MHKCDITLQE IIKTLNSLTE QKTLCTELTV TDIFAASKNT TEKETFCAA TVLRQFYSHH EKDTRCLGAT AQQFHRHKQL IRFLKRLDRN LWGLAGLNSC PVKEANQSTL ENFLERLKTI MREKYSKCSS
Specificity:	Chromosomal location:5q31.1
Characteristics:	Length (aa):130
Purity:	> 98 % by SDS-PAGE
Endotoxin Level:	< 0.1 ng per µg of IL-4

Target Details

Target:	IL-4 (IL4)
Alternative Name:	IL-4 (IL4 Products)

Target Details

Background: IL-4 is a pleiotropic cytokine that regulates diverse T and B cell responses including cell proliferation, survival and gene expression. Produced by mast cells, T cells and bone marrow stromal cells, IL-4 regulates the differentiation of naive CD4+ T cells into helper Th2 cells, characterized by their cytokine-secretion profile that includes secretion of IL-4, IL-5, IL-6, IL-10, and IL-13, which favor a humoral immune response. Another dominant function of IL-4 is the regulation of immunoglobulin class switching to the IgG1 and IgE isotypes. Excessive IL-4 production by Th2 cells has been associated with elevated IgE production and allergy. Recombinant human IL-4 is a 14.9 kDa globular protein containing 130 amino acid residues
Synonyms: IL4, BSF1, IL-4, BCGF1, BSF-1, BCGF-1

Molecular Weight: 14.9 kDa

Gene ID: 3565

NCBI Accession: [NM_000589](#), [NP_000580](#)

UniProt: [P05112](#)

Pathways: [JAK-STAT Signaling](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Production of Molecular Mediator of Immune Response](#), [Proton Transport](#), [Activated T Cell Proliferation](#)

Application Details

Application Notes: The ED50 as determined by the dose-dependent stimulation of human TF-1 cells is 0.1-0.5 ng/mL.

Comment: Cytokines & Growth Factors

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: The lyophilized IL-4 should be reconstituted in water to a concentration not less than 100 µg/mL. This solution can be diluted into other buffered solutions or stored at -20 °C for future use.

Buffer: PBS

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: RT, 0 °C, 4 °C, -20 °C

Handling

Storage Comment: The lyophilized IL-4, though stable at room temperature, is best stored desiccated below 0°C. Reconstituted IL-4 should be stored in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.