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Product datasheet for AR09136PU-L

Interleukin-4 / IL4 (25-153, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Interleukin-4 / IL4 (25-153, His-tag) human recombinant protein, 0.25 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MHKCDITLQE IIKTLNSLTE QKTLCTELTV TDIFAASKNT TEKETFCRAA TVLRQFYSHH EKDTRCLGAT AQQFHRHKQL IRFLKRLDRN LWGLAGLNSC PVKEANQSTL ENFLERLKTI MREKYSKCSS
Tag:	His-tag
Predicted MW:	17.2 kDa
Concentration:	lot specific
Purity:	>95% pure by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol
Bioactivity:	Biological: The ED50 for this effect is less or equal to 0.5 ng/ml. Measured in a cell proliferation assay using TF1 human erythroleukemic cells.
Endotoxin:	< 1.0 EU per 1 ug of protein (determined by LAL method)
Preparation:	Liquid purified protein
Protein Description:	Recombinant Interleukin-4 protein, fused to His-tag at N-terminus, was expressed in E.coli and was purified by conventional chromatography techniques, after refolding of the isolated inclusion bodies in a renaturation buffer.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_000580
Locus ID:	3565
UniProt ID:	P05112, D4HNR6

View online »

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Cytogenetics: 5q31.1

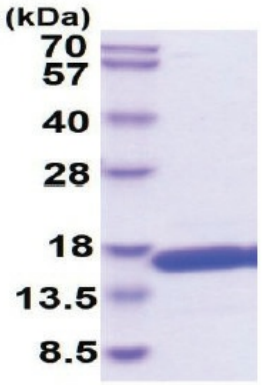
Synonyms: BCGF-1; BCGF1; BSF-1; BSF1; IL-4

Summary: The protein encoded by this gene is a pleiotropic cytokine produced by activated T cells. This cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. This gene, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. IL4 is considered an important cytokine for tissue repair, counterbalancing the effects of proinflammatory type 1 cytokines, however, it also promotes allergic airway inflammation. Moreover, IL-4, a type 2 cytokine, mediates and regulates a variety of human host responses such as allergic, anti-parasitic, wound healing, and acute inflammation. This cytokine has been reported to promote resolution of neutrophil-mediated acute lung injury. In an allergic response, IL-4 has an essential role in the production of allergen-specific immunoglobin (Ig) E. This pro-inflammatory cytokine has been observed to be increased in COVID-19 (Coronavirus disease 2019) patients, but is not necessarily associated with severe COVID-19 pathology. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Aug 2020]

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Allograft rejection, Asthma, Autoimmune thyroid disease, Cytokine-cytokine receptor interaction, Fc epsilon RI signaling pathway, Hematopoietic cell lineage, Jak-STAT signaling pathway, T cell receptor signaling pathway

Product images:



15% SDS-PAGE (3ug)

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