

rHuIL-4

Recombinant Human Interleukin-4 from HEK 293 cells

Product	Cat#	Package size
Recombinant Human Interleukin-4 from HEK 293 cells	C6021.0002	2µg
Recombinant Human Interleukin-4 from HEK 293 cells	C6021.0010	10µg

Synonyms: BCGF, BCDF, B cell stimulating factor, BSF-1, Lymphocyte stimulatory factor 1, IL-4, MGC79402, Binetrakin, Pitrakinra.

Product description

Recombinant human IL-4 isolated from HEK 293 cell is a single, glycosylated polypeptide of 130 amino acids and a molecular mass of 14-19 kDa due to glycosylation.

IL-4 is a pleiotropic cytokine produced by activated T cells. IL-4 is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL-13, which may contribute to many overlapping functions of IL-4 and IL-13.

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. IL-4, IL-3, IL-5, IL-13, and CSF2 form a cytokine gene cluster on chromosome 5q, with the IL-4 gene particularly close to IL-13. IL-4, IL-3 and IL-5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.

Source: HEK 293 cells

Biological activity

The activity was determined by the dose dependent stimulation of the proliferation of human TF-1 cells (human erythroleukemic indicator cell line) and was found to be 0.17ng/mL.

Purity: Greater than 95% by HPLC analysis.

Amino acid sequence (AA 25 to 153)

MHKCDITLQE IIKTLNLSLTE QKTLCTELTV TDIFAASKNT TEKETFCRAA TVLRQFYSHH EKDTRCLGAT AQQFHRHKQL IRFLKRLDRN LWGLAGLNSC PVKEANQSTL ENFLERLTKI MREKYSKCSS.

Formulation: Sterile filtered (0.2µm filter) white lyophilized (freeze-dried) powder.

Solubility / Reconstitution

It is recommended to reconstitute the lyophilized IL-4 in sterile 1xPBS containing 0.1% endotoxin-free recombinant HSA.

Stability

Lyophilised rHuIL-4 although stable at room temperature for 3 weeks, should be stored at -20°C. Reconstituted rHuIL-4 is best stored refrigerated at +2°C to +8°C between 2-7 days and at -20°C for long term storage. For long term storage it is recommended to add a carrier protein (e.g., 0.1% HSA or BSA).

Please prevent from repeated freeze-thaw cycles.

Usage

This product is for research/laboratory usage only. It may not be used as drug, agricultural or pesticidal product, food additive or household chemical.