

Product datasheet for TP728269L

OriGene Technologies, Inc.

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Recombinant IL-4 (Interleukin-4), Human

Product data:

Product Type: Recombinant Proteins

Description: Recombinant IL-4 (Interleukin-4), Human

Species: Human
Expression Host: E. coli

Expression cDNA Clone

or AA Sequence:

MHKCDITLQEIIKTLNSLTEQKTLCTELTVTDIFAASKNTTEKETFCRAATVLRQFYSHHEKDTRCLGATAQQ FHRHKQLIRFLKRLDRNLWGLAGLNSCPVKEANQSTLENFLERLKTIMREKYSKCSS with polyhistidine

tag at the C-terminus.

Tag: His Tag (C-term)

Predicted MW: The protein has a calculated MW of 15.9 kDa. The protein migrates as 12 kDa under reducing

condition (SDS-PAGE analysis).

Purity: >98% as determined by SDS-PAGE.

Buffer: The protein was lyophilized from a 0.2 μm filtered solution containing 1X PBS, pH 8.0.

Bioactivity: Measure by its ability to induce TF-1 cells proliferation. The ED₅₀ for this effect is < 0.2 ng/mL.

The specific activity of recombinant human IL-4 is approximately >2.8 x 10⁷ IU/mg.

Endotoxin: $< 0.1 \text{ EU per 1} \mu \text{g of the protein by the LAL method.}$

Reconstitution Method: Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile H_2O to a concentration not less than 100 $\mu g/mL$ and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Applications: Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: P05112

Synonyms: BCGF, BCDF, B-cell Stimulating Factor (BSF-1)

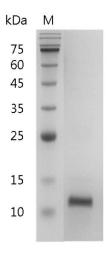




Summary:

Interleukin-4 (IL-4) is a key cytokine produced by activated T cells, mast cells, basophils, neutrophils and eosinophils. IL-4 is critical for the development of Th2-mediated responses, which is related to allergy and asthma. It can also regulate B cell responses, including survival, cell proliferation and gene expression. IL-4 also plays fundamental role for B-cell stimulation, including induction of the IgE isotype switch.

Product images:



SDS- PAGE analysis of recombinant human IL-4