

## **Product datasheet for TP728269S**

### 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: FHRI

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 ED $_{50}$  for this effect is <0.2 ng/mL.

The specific activity of recombinant human IL-4 is approximately >2.8 x 10<sup>7</sup> 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)

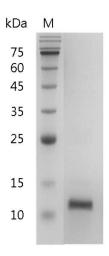




#### **Summary:**

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