

Active Recombinant Human IL4 protein, His-tagged

Cat. No. IL4-483H Lot. No. (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human IL4 protein(P05112)(25~153 aa), fused with N-terminal His tag, was expressed in HEK293.
Species	Human
Source	HEK293
ProteinLength	25-153 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	The interleukin 4 (IL4,) is a cytokine that induces differentiation of naive helper T cells (Th0 cells) to Th2 cells. Upon activation by IL4, Th2 cells subsequently produce additional IL4 in a positive feedback loop. IL4 has many biological roles, including the stimulation of activated B-cell and T-cell proliferation, and the differentiation of B cells into plasma cells. It is a key regulator in humoral and adaptive immunity. IL4 induces B-cell class switching to IgE, and up-regulates MHC class II production. IL4 decreases the production of Th1 cells, macrophages, IFN-gamma, and dendritic cell IL12. The activity of IL4 is usually measured by a cell proliferation assay using TF-1 cells. TF-1 cells were seeded into triplicate wells of 96-well plates at a density of 20000 cells/well with 10% serum standard 1640 which contains various concentrations of recombinant human IL4. After incubated for 3 days, cells were observed by inverted microscope and cell proliferation was measured by Cell

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Counting Kit-8 (CCK-8). Briefly, 10 μ of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 2-4 hours at 37°C. Proliferation of TF-1 cells after incubation with IL4 for 3 days observed by inverted microscope was shown. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with rhIL4 for 3 days. It was obvious that rhIL4 significantly increased cell viability of TF-1 cells. The ED50 is 0.03 ng/ml.

Molecular Mass	16.6kDa
Endotoxin	<1.0EU per 1 μ g (determined by the LAL method).
Purity	> 95% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	IL4 interleukin 4 [Homo sapiens]
Official Symbol	IL4
Synonyms	IL4; interleukin 4; interleukin-4; B cell growth factor 1; B_cell stimulatory factor 1; BCGF 1; BCGF1; BSF1; IL 4; lymphocyte stimulatory factor 1; MGC79402; binetrakin; pitrakinra; IL-4; BSF-1; BCGF-1;
Gene ID	3565

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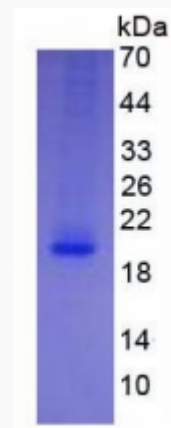
mRNA Refseq [NM_000589](#)

Protein Refseq [NP_000580](#)

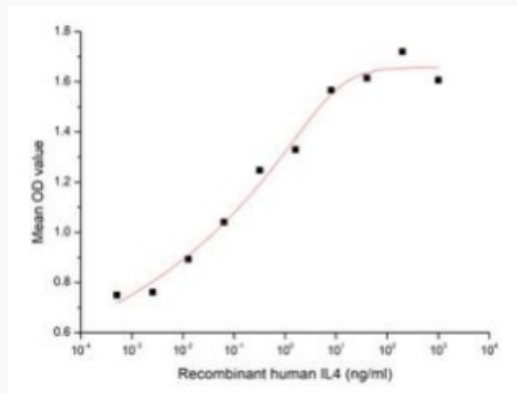
MIM [147780](#)

UniProt ID [P05112](#)

SDS-PAGE



Activity



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