

Active Recombinant Mouse Il4

Cat. No. Il4-297M Lot. No. (See product label)

SPECIFICATION

| | |
|-------------------------|--|
| Product Overview | Recombinant Mouse Il4 was expressed in CHO Cells. |
| Species | Mouse |
| Source | CHO |
| Description | <p>Interleukin-4 (IL-4) is a pleiotropic cytokine regulates diverse T and B cell responses including cell proliferation, survival, and gene expression. It has important effects on the growth and differentiation of different immunologically competent cells.</p> <p>Interleukin-4 is produced by mast cells, T cells, and bone marrow stromal cells. IL-4 regulates the differentiation of native CD4+ T cells (Th0 cells) into helper Th2 cells, and regulates the immunoglobulin class switching to the IgG1 and IgE isotypes. IL-4 has numerous important biological functions including stimulating B-cells activation, T-cell proliferation and CD4+ T-cells differentiation to Th2 cells. It is a key regulator in hormone control and adaptive immunity. IL-4 also plays a major role in inflammation response and wound repair via activation of macrophage into M2 cells. IL-4 is stabilized by three disulphide bonds forming a compact globular protein structure. Four alpha-helix bundle with left-handed twist is dominated half of the protein structure with 2 overhand connections and fall into a 2-stranded anti-parallel beta sheet.</p> |
| Form | Lyophilized after extensive dialysis against PBS. |
| Bio-activity | ED50 < 2="" ng/ml,="" measured="" in="" a="" cell="" proliferation="" assay="" |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

using="" murine="" ht-2="" cells,="" corresponding="" to="" a="" specific="" activity="" of="" >5 x 10⁵ units/mg.

Molecular Mass 15 kDa, observed by reducing SDS-PAGE.

AA Sequence His23-Ser140.

Endotoxin < 0.2="" eu/μg,="" determined="" by="" lal="" >

Purity >95% as analyzed by SDS-PAGE and HPLC.

Storage Lyophilized recombinant protein remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, rmlL-4 should be stable up to 1 week at 4°C or up to 2 months at -20°C.

Reconstitution Reconstituted in ddH₂O or PBS at 100 μg/ml.

GENE INFORMATION

Gene Name [IL4 interleukin 4 \[Mus musculus \]](#)

Official Symbol IL4

Synonyms IL4; interleukin 4; interleukin-4; IGG1 induction factor; B-cell growth factor 1; B-cell stimulatory factor 1; lymphocyte stimulatory factor 1; B-cell IgG differentiation factor; Il-4; BSF-1;

Gene ID [16189](#)

mRNA Refseq [NM_021283](#)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

| | |
|-----------------------|--|
| Protein Refseq | NP_067258 |
| UniProt ID | P07750 |
| Pathway | Allograft rejection, organism-specific biosystem; Allograft rejection, conserved biosystem; Asthma, organism-specific biosystem; Asthma, conserved biosystem; Autoimmune thyroid disease, organism-specific biosystem; Autoimmune thyroid disease, conserved biosystem; Cytokine-cytokine receptor interaction, organism-specific biosystem; |
| Function | cytokine activity; cytokine receptor binding; growth factor activity; interleukin-4 receptor binding; |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA