

Active Recombinant Mouse IL4 protein, His-GST-tagged

Cat. No. IL4-646M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Mouse IL4 protein(P07750)(21~140 aa), fused with N-terminal His tag and GST tag, was expressed in E.coli.
Species	Mouse
Source	E.coli
ProteinLength	21-140 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. Besides, Interleukin 2 Receptor Gamma (IL2Rg) has been identified as an interactor of IL4, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse IL4 and recombinant mouse IL2Rg. Briefly, IL4 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to IL2Rg-coated microtiter wells and incubated for 2h at 37°C. Wells were

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washed with PBST and incubated for 1h with anti-IL4 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µ stop solution to the wells and read at 450nm immediately. The binding activity of IL4 and IL2Rg was shown, and this effect was in a dose dependent manner.

Molecular Mass	43.6kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 97% 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 [<i>Mus musculus</i>]
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

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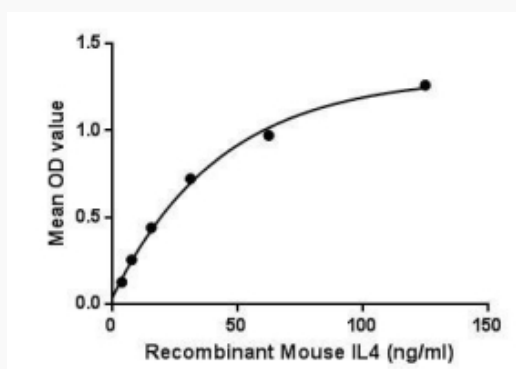
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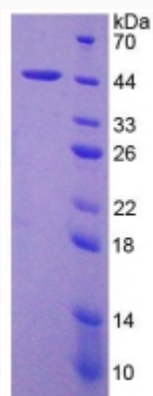
mRNA Refseq NM_021283

Protein Refseq NP_067258

Activity



SDS-PAGE



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