

Interleukin 4 Active Protein | IL4 active protein

Active Interleukin 4 (IL4)

CATALOG #
AAA150060

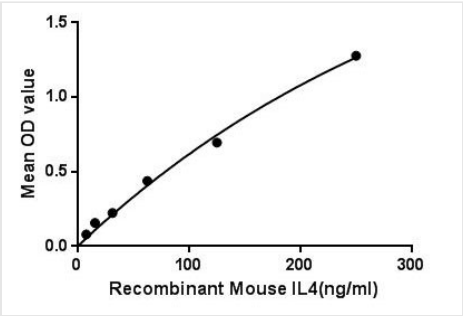
APPLICATIONS
Activity Assay, Cell Culture

PRODUCT SYNONYMS

Interleukin 4; Active Interleukin 4 (IL4); BSF1; BCGF1 ; B Cell Stimulatory Factor 1; Lymphocyte stimulatory factor 1; B Cell Growth Factor; Binetrakin; Pitrakinra; IL4 active protein

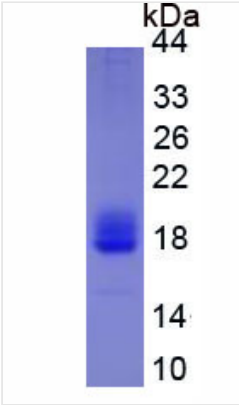
PRODUCT SPECIFICATIONS

Purity/Purification	>95%
Form/Format	Freeze-dried powder 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	His21~Ser140
Sequence Length	140
Applicable Applications for IL4 active protein	Activity Assay, Cell Culture
Species	Mouse
Tag	N-terminal His Tag
Isoelectric Point	8.3
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (PH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. Stability: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.



Bioactivity

Figure. The binding activity of IL4 with IL2g. The interleukin 4 (IL4, IL-4) is a cytokine that induces differentiation of naive helper T cells (Th0 cells) to Th2 cells. Interleukin 4 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. IL-4 induces B-cell class switching to IgE, and up-regulates MHC class II production. IL-4 decreases the production of Th1 cells, macrophages, IFN-gamma, and dendritic cell IL-12. 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 100uL were then transferred to IL2Rg-coated microtiter wells and incubated for 2h at 37. Wells were 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. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of IL4 and IL2Rg was shown in Figure 1, and this effect was in a dose dependent manner.



SDS-PAGE

Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for IL4 active protein	Cytokine; Immune molecule
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NCBI AND UNIPROT INFORMATION

NCBI GI #	10946584
NCBI GeneID	16189
NCBI Accession #	NP_067258.1
NCBI GenBank Nucleotide #	NP_067258.1
UniProt Accession #	P07750
Molecular Weight	Predicted Molecular Mass: 15.2kDa Accurate Molecular Mass: 18kDa, 19kDa
NCBI Official Full Name	interleukin-4
NCBI Official Synonym Full Names	interleukin 4
NCBI Official Symbol	IL4
NCBI Official Synonym Symbols	IL-4; BSF-1
NCBI Protein Information	interleukin-4
UniProt Protein Name	Interleukin-4
UniProt Gene Name	IL4
UniProt Synonym Gene Names	IL-4; IL-4; BSF-1
UniProt Entry Name	IL4_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/il4-active-protein/interleukin-4/150060>