

Interleukin 9 Active Protein | IL9 active protein

Active Interleukin 9 (IL9)

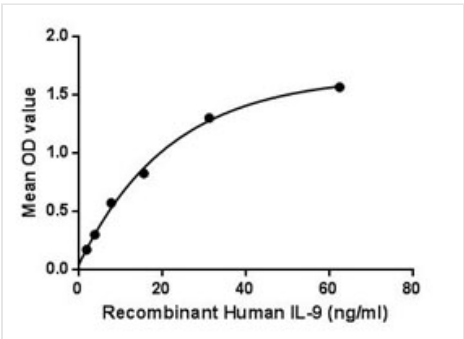
CATALOG # AAA150065	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Interleukin 9; Active Interleukin 9 (IL9); HP40; P40; TCGFIII; TCGF3; T Cell Growth Factor III; P40 T-Cell And Mast Cell Growth Factor; P40 Cytokine; Homolog Of Mouse T Cell And Mast Cell Growth Factor 40; IL9 active protein

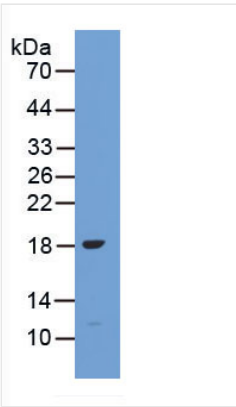
PRODUCT SPECIFICATIONS

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	Gln19~Ile144
Sequence Length	144
Applicable Applications for IL9 active protein	Activity Assay, Cell Culture
Species	Human
Tag	N-terminal His Tag
Isoelectric Point	9.1
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.

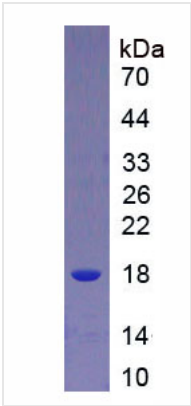


Bioactivity

Interleukin 9, also known as IL-9, is a pleiotropic cytokine belonging to the group of interleukins. IL-9 secreted by CD4 helper cells that acts as a regulator of a variety of hematopoietic cells. This cytokine stimulates cell proliferation and prevents apoptosis. It functions through the interleukin-9 receptor (IL9R), which activates different signal transducer and activator (STAT) proteins namely STAT1, STAT3 and STAT5 and thus connects this cytokine to various biological processes. Besides, Interleukin 9 Receptor (IL9R) has been identified as an interactor of IL-9, thus a binding ELISA assay was conducted to detect the interaction of recombinant human IL-9 and recombinant human IL9R. Briefly, IL-9 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to IL9R-coated microtiter wells and incubated for 2h at 37. Wells were washed with PBST and incubated for 1h with anti-IL-9 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 IL-9 and IL9R was shown in Figure 1, and this effect was in a dose dependent manner. Figure. The binding activity of IL-9 with IL9R



WB (Western Blot)
Figure. Western Blot



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for IL9 active protein	Cytokine; Apoptosis; Infection immunity; Hematology
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NCBI AND UNIPROT INFORMATION

NCBI GI #	10834980
NCBI GeneID	3578
NCBI Accession #	NP_000581.1
NCBI GenBank Nucleotide #	NP_000581.1
UniProt Accession #	P15248

Molecular Weight	Predicted Molecular Mass: 17.8kDa Accurate Molecular Mass: 18kDa
NCBI Official Full Name	interleukin-9
NCBI Official Synonym Full Names	interleukin 9
NCBI Official Symbol	IL9
NCBI Official Synonym Symbols	P40; HP40; IL-9
NCBI Protein Information	interleukin-9
UniProt Protein Name	Interleukin-9
UniProt Gene Name	IL9
UniProt Synonym Gene Names	IL-9
UniProt Entry Name	IL9_HUMAN

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/il9-active-protein/interleukin-9/150065>