

Interleukin 10 Active Protein | IL10 active protein

Active Interleukin 10 (IL10)

CATALOG # AAA150056	HOST E. coli	APPLICATIONS Activity Assay, Cell Culture
-------------------------------	------------------------	---

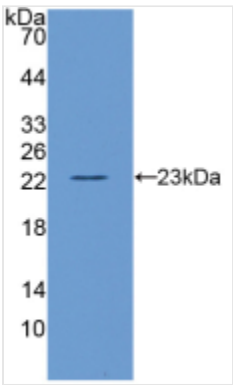
PRODUCT SYNONYMS

Interleukin 10; Active Interleukin 10 (IL10); CSIF; IL10A; TGIF; Cytokine Synthesis Inhibitory Factor; IL10 active protein

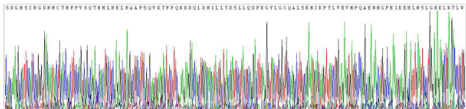
PRODUCT SPECIFICATIONS

Host	E. coli
Purity/Purification	>95%
Form/Format	20mM Tris, 150mM NaCl, pH8.0, containing 0.01% skl and 5% trehalose.
Concentration	Original Concentration: 400ug/mL (varies by lot)
Applicable Applications for IL10 active protein	Activity Assay, Cell Culture
Organism Species	Rattus norvegicus (Rat)
Source	Prokaryotic expression.
Residues	Ser19~Asn178
Tags	N-terminal His-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	9.1
Usage	Reconstitute in ddH2O to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Stability Test: 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.

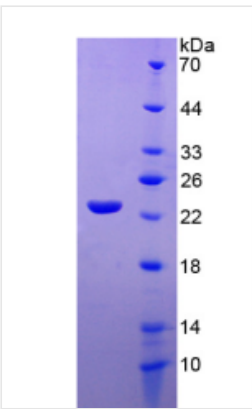
IMAGES



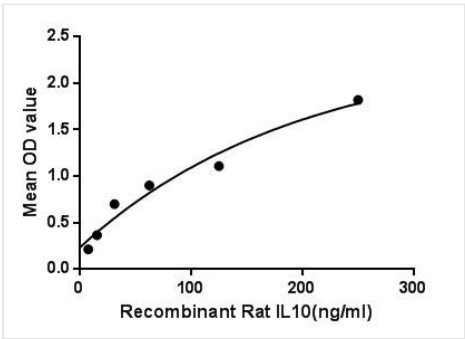
WB (Western Blot)
Sample: Recombinant IL10, Rat;Antibody: Rabbit Anti-Rat IL10 Ab



Gene Sequencing
Figure. Gene Sequencing (Extract)



SDS_PAGE
Sample: Active recombinant IL10, Rat



Bioactivity
Interleukin 10 (IL10), also known as human cytokine synthesis inhibitory factor (CSIF), is an anti-inflammatory cytokine. IL10 is a cytokine with multiple, pleiotropic, effects in immunoregulation and inflammation. It downregulates the expression of Th1 cytokines, MHC class II antigens, and co-stimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. IL10 can block NF-B activity, and is involved in the regulation of the JAK-STAT signaling pathway. Investigation also has shown that IL-10 predominantly inhibits lipopolysaccharide (LPS) and bacterial product mediated induction of the pro-inflammatory cytokines TNF, IL-1, IL-12 and IFN secretion from Toll-Like Receptor (TLR) triggered myeloid lineage cells. Besides, Interleukin 10 Receptor Alpha (IL10Ra) has been identified as an interactor of IL10, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat IL10 and recombinant rat IL10Ra. Briefly, IL10 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to IL10Ra-coated microtiter wells and incubated for 2h at 37. Wells were washed with PBST and incubated for 1h with anti-IL10 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 IL10 and IL10Ra was shown in Figure 1, and this effect was in a dose dependent manner. Figure. The binding activity of IL10 with IL10Ra.

```
SK GHSIRGDNNC THFPVSQTHM LRELRAAFSQ
VKTFQKKDQ LDNILLTDSL LQDFKGYLGC QALSEMIKFY LVEVMPQAEI
HGPEIKEHLN SLGEKLTLM IQLRRCHRFL PCENKSKAVE QVKNDFNKLQ
DKGVYKARNE FDIFINCIEA YVTLKMKI
```

Sequence

ADDITIONAL INFORMATION

Product Categories/Family for IL10 active protein	Cytokine; Infection immunity
---	------------------------------

NCBI AND UNIPROT INFORMATION

NCBI GI #	148747382
-----------	-----------

NCBI GeneID	25325
NCBI Accession #	NP_036986.2
NCBI GenBank Nucleotide #	NP_036986.2
UniProt Accession #	P29456
Molecular Weight	Predicted Molecular Mass: 22.3kDa Accurate Molecular Mass: 22kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	interleukin-10
NCBI Official Synonym Full Names	interleukin 10
NCBI Official Symbol	IL10
NCBI Official Synonym Symbols	IL10X
NCBI Protein Information	interleukin-10
UniProt Protein Name	Interleukin-10
UniProt Gene Name	IL10
UniProt Synonym Gene Names	IL-10; IL-10; CSIF
UniProt Entry Name	IL10_RAT

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/e-coli-il10-active-protein/interleukin-10/150056>