

Interleukin 10 (IL10) Active Protein | IL10 active protein

Active Interleukin 10 (IL10)

CATALOG # AAA146605	HOST 293F cell	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

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

PRODUCT SPECIFICATIONS

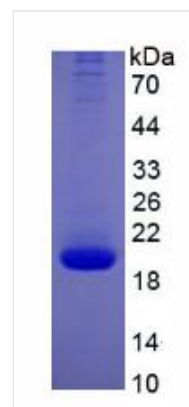
Host	293F cell
Purity/Purification	> 97%
Form/Format	Freeze-dried powder
Sequence Length	178
Applicable Applications for IL10 active protein	Activity Assay, Cell Culture
Fragment	Ser19~Asn178
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Organism Species	Human
Isoelectric Point	7.6
Usage	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and 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. 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

Table 1. Inhibitory effects of IL-10 on IL-1 β production by THP1 cells

Sample (cell supernatant of THP1 cells)	Concentration of IL-1 β (ng/mL)
Stimulated with LPS (1 μ g/mL) and IL-10 (5ng/mL)	<2.343
Stimulated with LPS (1 μ g/mL) and IL-10 (10ng/mL)	<2.343
Stimulated with LPS (1 μ g/mL)	19.9
Unstimulated	<2.343

Application Data



SDS-PAGE

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Activity

Interleukin 10 (IL-10), also known as human cytokine synthesis inhibitory factor (CSIF), is an anti-inflammatory cytokine. IL-10 was initially reported to suppress cytokine secretion, antigen presentation and CD4 T cell activation. Further investigation has shown that IL-10 predominantly inhibits lipopolysaccharide (LPS) mediated induction of the pro-inflammatory cytokines TNF α , IL-1 β , IL-12, and IFN γ made by cells such as macrophages and Th1 T cells. Therefore, THP1 cells were cultured in 24 well plates at a concentration of 106 cells/ml and activated by LPS (1ug/mL) in the absence or presence of IL-10 (5ng/mL, 10ng/mL) for 24h and production of IL-1 β was determined in the supernatants by cytokine specific ELISA. Activation of THP1 cells with LPS (1ug/mL) resulted in high levels of production of IL-1 β and strong inhibitory effects of IL-10 (5ng/mL, 10ng/mL) were observed on the production of IL-1 β as shown in Table 1.

ADDITIONAL INFORMATION

Product Categories/Family for IL10
active protein

Active Protein

NCBI AND UNIPROT INFORMATION

NCBI GI #	10835141
NCBI GeneID	3586
NCBI Accession #	NP_000563.1
NCBI GenBank Nucleotide #	NM_000572.2
UniProt Accession #	P22301
Molecular Weight	20.3kDa; 18kDa
NCBI Official Full Name	interleukin-10
NCBI Official Synonym Full Names	interleukin 10
NCBI Official Symbol	IL10
NCBI Official Synonym Symbols	CSIF; TGIF; GVHDS; IL-10; IL10A
NCBI Protein Information	interleukin-10
UniProt Protein Name	Interleukin-10
UniProt Gene Name	IL10
UniProt Synonym Gene Names	IL-10; CSIF

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://www.aaabiotech.com/293f-cell-active-protein/interleukin-10-il10/146605>