

# Recombinant human IL-10 protein

Catalog Number: ATGP3920

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

19-178aa

### UniProt No.

P22301

### NCBI Accession No.

NP\_000563

### Alternative Names

Interleukin-10, IL-10, Cytokine synthesis inhibitory factor, CSIF, GVHDS, IL10A, TGIF, T-cell growth inhibitory factor

## PRODUCT SPECIFICATION

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### Molecular Weight

19.4 kDa (166aa)

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1µg of protein (determined by LAL method)

### Biological Activity

Measured in a cell proliferation assay using MC/9 mouse mast cells. The ED50 range  $\leq$ 5ng/ml.

### Tag

His-Tag

### Application

SDS-PAGE, Bioactivity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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## Description

IL-10, also known as Interleukin-10, is an anti-inflammatory cytokine. It inhibits the synthesis of pro-inflammatory cytokines like IFN-gamma, IL2, IL3, TNF and GM-CSF produced by activated macrophages and by helper T-cells. This protein has effects in immunoregulation and inflammation and down-regulates the expression of Th1 cytokines, MHC class II antigens, and costimulatory molecules on macrophages. It acts on many cells of the immune system where it has profound anti-inflammatory functions, limiting excessive tissue disruption caused by inflammation. This protein controls the inflammatory response of macrophages by reprogramming essential metabolic pathways including mTOR signaling. Recombinant human IL-10, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

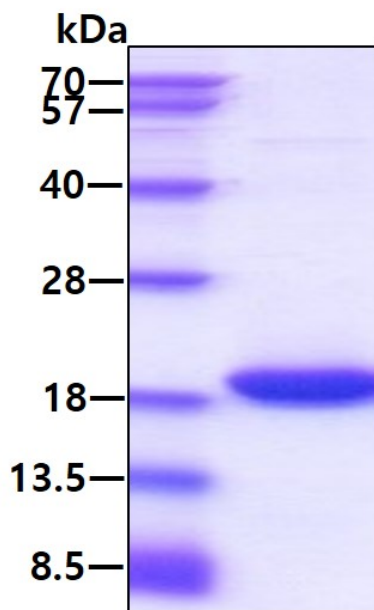
SPGQGTQSEN SCTHFPGNLP NMLRDLRDAF SRVKTFQMK DQLDNLLLKE SLLEDFKGYL GCQALSEMIQ FYLEEVMPQA  
ENQDPDIKAH VNSLGENLKT LRLRLRRCHR FLPCENKSKA VEQVKNAFNK LQEKGIYKAM SEFDIFINYI EAYMTMKIRN  
<HHHHHH>

## General References

Jog NR., et al. (2018) Front Immunol. 9:2198.  
Harling K., et al. (2019) Cell Mol Immunol. 16:275-287.

## DATA

### SDS-PAGE

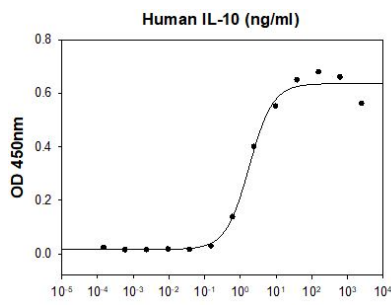


3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

## Biological Activity

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Human IL-10 stimulates cell proliferation of the MC/9 mouse mast cells. The ED50 range  $\leq 5$  ng/ml.