

Interleukin-10

Rat, Recombinant (rrIL10)

Expressed in *E. coli*

Cat. No. CRP08104

Lot. No. (See product label)

PRODUCT INFORMATION

Description: IL-10 is an immunosuppressive cytokine produced by a variety of mammalian cell types including macrophages, monocytes, T cells, B cells and keratinocytes. IL-10 inhibits the expression of proinflammatory cytokines such as IL-1 and TNF α . Like IL-4, IL-10 enhances humoral immune responses and attenuates cell-mediated immune reactions. Human IL-10 active on murine cells, but murine IL-10 is inactive on human cells.

Amino-Acid Sequence: 160 aa , non-glycosylated

M. W. : 18.7 kDa

Recombinant: Expressed in *E. coli*

Purity: >95% by SDS-PAGE and HPLC analyses.

Formulation: Lyophilized from a 0.2 μ m filtered concentrated (1mg/ml) solution in PBS, pH 7.4.

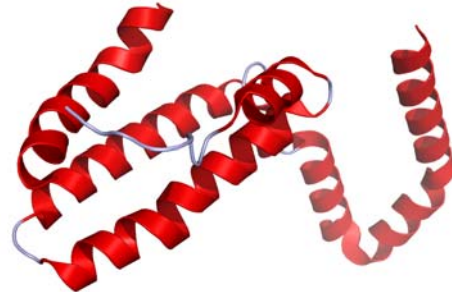
Specific Activity: Fully biologically active when compared to standard. The ED50 as determined by the dose-dependent inhibition of antigen-specific T cell proliferation is less than 10ng/ml.

Endotoxin: Less than 1EU/ μ g of rrIL-10 as determined by LAL method.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at <-20°C. Further dilutions should be made in appropriate buffered solutions.

Storage: This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

FOR RESEARCH USE ONLY



[PDB](#) rendering based on 2H24

GENE INFORMATION

Gene Name: [IL10](#)

Synonyms: interleukin 10; IL10X, CSIF; IL-10; IL10A; MGC126450; MGC126451; TGIF; B-TCGF; Cytokine synthesis inhibitory factor; Interleukin-10 precursor

Gene Type: protein coding

mRNA Refseq: [NM_012854.2](#)

Protein Refseq: [NP_036986.2](#)

MIM: [124092](#)

GeneID: [25325](#)

UniProt ID: P29456

Chromosome Location: 13q13

Pathway: Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway ; T cell receptor signaling pathway

Function: cytokine activity; receptor binding; protein binding; transcriptional repressor activity

REFERENCES

- 1.Crawley J. B, et al. Interleukin-10 stimulation of phosphatidylinositol 3-kinase and p70 S6 kinase is required for the proliferative but not the antiinflammatory effects of the cytokine. *J. Biol. Chem.* 271: 16357-16362, 1996.
- 2.Alamartine E, et al. Interleukin-10 promoter polymorphisms and susceptibility to skin squamous cell carcinoma after renal transplantation. *J. Invest. Derm.* 120: 99-103, 2003.
- 3.Brooks D. G, et al. Interleukin-10 determines viral clearance or persistence in vivo. *Nature Med.* 12: 1301-1309, 2006.

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