Recombinant Human Interleukin-10(rHu IL-10)

Catalog No: #70110

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Description

Product Name	Recombinant Human Interleukin-10(rHu IL-10)
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	> 95 % by SDS-PAGE and HPLC analyses.
Species Reactivity	Hu
Target Name	rHu IL-10
Other Names	CSIF
Accession No.	accession:P22301 GeneID:3586
Uniprot	P22301
GeneID	3586;
Calculated MW	Approximately 18.6 kDa, a sing
SDS-PAGE MW	Sterile Filtered White lyophil
Target Sequence	SPGQGTQSEN SCTHFPGNLP NMLRDLRDAF SRVKTFFQMK DQLDNLLLKE SLLEDFKGYL GCQALSEMIQ FYLEEVMPQA ENQDPDIKAH VNSLGENLKT LRLRLRRCHR FLPCENKSKA VEQVKNAFNK LQEKGIYKAM SEFDIFINYI EAYMTMKIRN
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.
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.

Background

Interleukin-10 (IL-10), also known as cytokine synthesis inhibitory factor (CSIF), is the charter member of the IL-10 family of α-helical cytokines that also includes IL-19, IL-20, IL-22, IL-24, and IL-26 AK155. IL-10 is secreted by many activated hematopoietic cell types as well as hepatic stellate cells, keratinocytes, and placental cytotrophoblasts. Whereas human IL-10 is active on mouse cells, mouse IL-10 does not act on human cells. IL-10 is a 178 amino acid molecule that contains two intrachain disulfide bridges and is expressed as a 36 kDa noncovalently associated homodimer. The IL-10 dimer binds to two IL-10 Rα IL-10R1 chains, resulting in recruitment of two IL-10 Rβ IL-10R2 chains and activation of a signaling cascade involving JAK1, TYK2, and STAT3. IL-10Rβ does not bind IL-10 by itself but is required for signal transduction. IL-10 is a critical molecule in the control of viral infections and allergic and autoimmune inflammation. It promotes phagocytic uptake and Th2 responses but suppresses antigen presentation and Th1 proinflammatory responses.

References

1. Eskdale J, Kube D, Tesch H, et al. 1997. Immunogenetics. 46:120-8.
2. Tan JC, Braun S, Rong H, et al. 1995. J Biol Chem. 270:12906-11.
3. Pestka S, Krause CD, Sarkar D, et al. 2004. Annu Rev Immunol. 22:929-79.

Note: This product is for in vitro research use only