

Human Interleukin 10 (IL-10) Protein, Recombinant

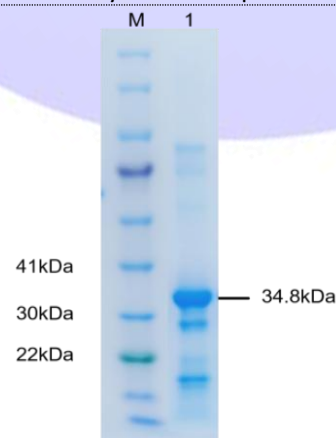
I. For sale

Product name	Catalog #	Package
Human Interleukin 10 (IL-10) Protein, Recombinant	P01I0023	10ug
		50ug
		500ug
		1mg

II. Product Description

Other Names	CSIF; TGIF; GVHDS; IL-10; IL10A
Protein & NCBI Number	P22301, NM_000572.3
Host	E.coli
Express Region	Met1-Asn178
Protein Sequence	MHSSALLCCLVLLTGVRASPGQGTQSENSCTHFPGNLPNMLRDL RDAFSRVKTFQMKDQLDNLKESLLEDFKGYLGCOALSEMIQFYLEEVMPQAENQD PDIKAHVNSLGENLKTLLRRLRRCHRFLPCENKSKAVEQVKNAFNKLOEKGIYKAMSE FDIFINYIEAYMTMKIRN
Molecular Weight	The protein consists of 304 amino acids (including the fusion tag), with a predicted molecular weight of 34.8kDa, which matches the actual molecular weight.
Fusion Tag	6×His-SUMO (N-terminus)
Purity	≥75% Non-reducing SDS-PAGE
Physical Property	Liquid
Components	0.01M PBS+20% glycerol, sterile solution.
Storage & Stability	After aliquoting, the stability of the samples can be maintained for up to 6 months at -20°C to -80°C, avoiding repeated freeze-thaw cycles.
Applications	Antibody preparation, immunoassay (ELISA, WB), subcellular localization and interaction protein identification, etc.
Lead Time	5 to 10 business days; 2 to 3 days for stock products

Figure. SDS-PAGE



Bis-Tris (MOPS) SDS-PAGE



III. Storage and Transportation

Transport at 2-8°C, product is stable for up to twelve months from date of receipt under sterile conditions at -20°C to -80°C.

IV. Notes

This product is for research use only. Please wear laboratory attire and disposable gloves when handling.

V. Background

IL-10 is composed of 178 amino acids, produced by B cells, Th1, Th2 and other adaptive immune cells. IL-10 activates a wide range of macrophage/monocyte functions, including the synthesis of monocyte factors, NO production, and the expression of major histocompatibility complex class II (MHC II) costimulatory molecules such as IL-12 and CD80/CD86. The inhibitory effect of IL-10 on IL-1 and TNF is key to its anti-inflammatory activity, as these two cytokines often have synergistic effects on inflammatory pathways and processes, expanding the inflammatory response through secondary mediators such as chemokines, PGs, and PAF. Regulating the inflammatory response in the context of constant stress is important for a living organism.

IL-10 is a multifunctional cytokine that regulates the function of hematopoietic cells.

VI. References

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2. Goff W L, Johnson W C, Parish S M, Barrington G M, Elsasser T H, Davis W C, Valdez R A. IL-4 and IL-10 inhibition of IFN-gamma- and TNF-alpha-dependent nitric oxide production from bovine mononuclear phagocytes exposed to *Babesia bovis* merozoites. *Vet Immunol Immunopathol*. 2002;84(3-4):237-251.
3. Pousset F, Cremona S, Dantzer R, Kelley K W, Parnet P. IL-10 and IL-4 regulate type-I and type-II IL-1 receptors expression on IL-1 beta-activated mouse primary astrocytes. *J Neurochem*. 2001;79(4):726-736.