Recombinant Mouse IL10

Cat No:HR2R2141

For research use only

Overview

Quantity	20 ?g
Gene Symbol	IL10
Gene ID	16153
Accession	P18893
Alternative Name	IL-10, Cytokine synthesis inhibitory factor, CSIF Recombinant Mouse Interleukin-10 (IL10)
Species	Mouse
Source	CHO cells
Description	IL-10 is produced by mouse Th2-cells following their stimulation by lectins. The main source for B-cell derived IL-10 in mice are Ly1 B-cells that express CD5 (Ly1) and CD11.In humans IL-10 is produced by activated CD8(+) peripheral blood T-cells, by T-helper CD4(+) T cell clones after both antigen-specific and polyclonal activation, by B cell lymphomas, and by monocytes following cell activation by bacterial lipopolysaccharides and mast cells. IL-10 is a homodimeric protein with subunits having a length of 160 amino acids. Human Interleukin10 shows 73% amino acid homology with mouse Interleukin-10. The murine IL-10 receptor has been cloned. This receptor is a protein of approximately 110 kDa that binds murine IL-10 specifically. This receptor is structurally related to receptors for IFN. The CD nomenclature for this receptor is CDw210. IL-10 inhibits the synthesis of a number of cytokines such as IFN-gamma, IL-2 and TNF-beta in Th1 T-helper subpopulations of T-cells but not of Th2 T-helper cells. This activity is antagonized by IL-4. The inhibitory effect on IFN- gamma production is indirect and appears to be the result of a suppression of IL-12 synthesis by accessory cells. In the human system, IL-10 is produced by, and down-regulates the function of, Th1 and Th2 cells.
Functions	ED50 was determined by the dose-dependent (with IL-4) proliferation of murine MC/9 cells, and was found to be < 2.0 ng/mL, corresponding to a specific activity of > 5.0 x 10^5 units/mg.
Formulation	Recombinant Interleukin-10 was lyophilized from 0.2 ?m filtered PBS solution, pH 7.0.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	19
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature

Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

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