Recombinant Human IL4

Cat No:HR2R1618

For research use only

Overview

Quantity	25 ?g
Gene Symbol	IL4
Gene ID	3565
Accession	P05112
Alternative Name	IL-4, B-cell stimulatory factor 1, BSF-1, Binetrakin, Lymphocyte stimulatory factor 1, Pitrakinra, BCGF, BCDF Recombinant Human Interleukin-4 (IL4)
Species	Human
Source	CHO cells
Description	IL4 is produced mainly by a sub-population of activated T helper cells which also secrete IL5 and IL6. The biological activities of IL4 are mediated by a specific receptor, the extracellular domain of which is related to the receptors for EPO, IL6, and the beta chain of the IL-2 receptor. IL4 participates in several B-cell activation processes as well as of other cell types. A co-stimulator of DNA-synthesis, IL4 induces the expression of class II MHC molecules on resting B-cells, enhances both secretion and cell surface expression of IgE and IgG1, and also regulates the expression of the low affinity Fc receptor for IgE on both lymphocytes and monocytes. Pre-treatment of macrophages with IL4 prevents the production of IL1, TNF-alpha and prostaglandins in response to activation of the cells by bacterial endotoxins or IFN-gamma.
Functions	The ED(50) was determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is ? 0.1 ng/mL, corresponding to a specific activity of > 1.0 x 10^7 units/mg.
Formulation	Interleukin-4 was lyophilized from a 0.2 ?m filtered solution in 2.5% glycine, 0.5% sucrose, 0.01% Tween80, 5 mM glutamic acid, pH 4.5.
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	15
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.