Recombinant Mouse IL4

Cat No:HR2R2174

For research use only

Overview

Quantity	1.0 ?g
Gene Symbol	IL4
Gene ID	16189
Accession	P07750
Alternative Name	IL-4, B cell IgG differentiation factor, B cell growth factor 1, B cell stimulatory factor 1, BSF-1, IGG1 induction factor, Lymphocyte stimulatory factor 1 Recombinant Mouse Interleukin-4 (IL4)
Species	Mouse
Source	E. coli
Description	IL-4 is produced mainly by a subpopulation of activated T cells (Th2) which are the biologically most active helper cells for B cells and which also secrete IL-5 and IL-6. Another subpopulation (Th1) also produces IL-4 albeit to a lesser extent. Non-T/Non-B cells of the lineage of mast cells also produce IL-4. The extracellular domain of the IL-4 receptor is related to the receptors for Epo, IL-6, and the beta chain of the IL-2 receptor. It has been given the name CD124. Two types of IL-4 receptor (IL-4R) exist: the type 1 receptor is a heterodimer consisting of CD132 and IL-4R-alpha. The type 2 receptor is a heterodimer consisting of IL-4R-alpha and IL-13R-alpha-1. The biological activities of IL-4 are species-specific; mouse IL-4 is inactive on human cells and human IL-4 is inactive on murine cells. IL-4 promotes the proliferation and differentiation of activated B cells, the expression of MHC class 2 antigens, and of low affinity IgE receptors in resting B-cells. IL-4 is probably an autocrine growth modulator for Hodgkins lymphomas.
Functions	The ED(50) was determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is ? 0.4 ng/mL, corresponding to a specific activity of ? 2.0 x 10^6 units/mg.
Formulation	Interleukin-4 was lyophilized from a 0.2 ?m filtered solution in PBS, pH 7.
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	14
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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