9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

IL 4 Rat

Interleukin-4 Rat Recombinant
CYK0334

Product Overview

Name	IL 4 Rat
Description	
Interleukin-4 Rat Recombinant	
Accession (Primary)	P20096
Synonyms	
BCGF, BCDF, B cell stimulating factor, BSF-1, Lymphocyte stimulatory factor 1, IL-4, MGC79402, Binetrakin, Pitrakinra.	
Introduction	
IL4 is a pleiotropic cytokine produced by activated T cells. IL4 is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. IL4, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
Lyophilized from a 0.2 μm filtered concentrated solution in PBS pH 7.4 and 5% trehalose.	
Stability	
Lyophilized Interleukin-4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL4 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	
Purity	
Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.	
Amino acid sequence	

HGCNDSPLR EIINTLNQVT EKGTPCTEMF VPDVLTATRN TTENELICRA SRVLRKFYFP RDVPPCLKNK SGVLGELRKL CRGVSGLNSL RSCTVNESTL TTLKDFLESL KSILRGKYLQ SCTSMS.

Biological Activity

The ED 50 as determined in a cell proliferation assay using rat splenocytes is less than 2ng/ml corresponding to a specific activity of 500,000IU/mg.

Solubility

It is recommended to reconstitute the lyophilized Interleukin 4 in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Protein content

Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 0.2 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a standard solution of IL-4 as a Reference Standard.

Precautions

IL 4 Rat is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P20096)