

# Interleukin-4 (IL-4), Rat Recombinant

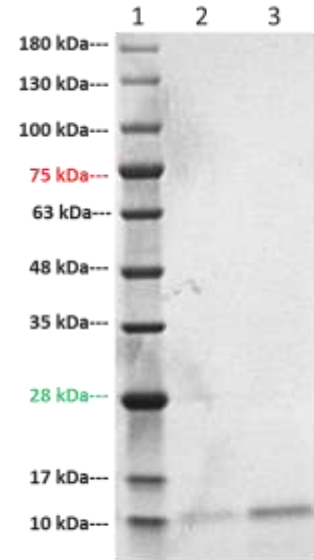
CATALOG #:	4139-10	10 µg
	4139-50	50 µg
	4139-1000	1 mg
ALTERNATE NAMES:	BCGF, BCDF, B cell stimulating factor, BSF-1, Lymphocyte stimulatory factor 1, IL-4, MGC79402, Binetrakin, Pitrakinra.	
SOURCE:	<i>E. coli</i>	
SEQUENCE:	Amino acids residue 25-147 (122 amino acids) of rat IL-4	
PURITY:	>98% by SDS-PAGE	
MOL. WEIGHT:	14.10 kDa	
ENDOTOXIN CONTENT:	<0.01EU/ug purified protein by LAL testing	
FORM:	Lyophilized powder.	
FORMULATION:	Lyophilized without any additives	

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1 mg/ml. The solution can be diluted into other aqueous buffers and stored at 4°C for 1 week or -20°C for future use.

**STORAGE CONDITIONS:** The lyophilized IL-4 is best-stored desiccated below 0°C. Reconstituted IL-4 should be stored at working aliquots at -20°C.

**DESCRIPTION:** IL4 is a pleiotropic cytokine and a potent lymphoid cell growth factor that stimulates the growth and survivability of certain B cells and T cells. It is produced by activated T cells and 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. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.

**BIOLOGICAL ACTIVITY:** The ED<sub>50</sub> as determined by the dose-dependent stimulation of the proliferation of con A-activated rat spleen cells is ≤ 1.5 ng/ml, corresponding to a specific activity of ≥ 6.6 x 10<sup>5</sup> units/mg.



Lane 1: MW Markers  
Lane 2: IL-4 (2ug)  
Lane 3: IL-4 (4ug)

**SDS-PAGE (4-20%) of Recombinant Human Irisin:** Recombinant IL-4 Protein loaded under reducing conditions and stained with Coomassie Blue. The protein has a predicted MW of ~ 14.10 kDa.

#### RELATED PRODUCTS:

- IL-4, human recombinant (Cat # 4137-10, -50, -1000)
- IL-4, murine recombinant (Cat # 4138-10, -1000)
- IL-4, rat recombinant (Cat # 4139-10, -1000)
- IL-4, Human CellExp™, human recombinant (Cat # 6463-10, -50)
- IL-4 Antibody (Cat # 5137-200)

**FOR RESEARCH USE ONLY! Not to be used in humans.**