

Recombinant Murine IL-4

CATALOG #:	4138-10	10 µg
	4138-1000	1 mg
LOT #:	_____	
SOURCE:	<i>E. coli</i>	
PURITY:	>98% by SDS-PAGE and HPLC analyses Endotoxin level is <0.1 ng per µg of IL-4.	
MOL. WEIGHT:	13.5 kDa	
FORMULATION:	Lyophilized with no additives	

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. The solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or –20°C for future use.

STORAGE CONDITIONS:

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

DESCRIPTION:

IL-4 is a pleiotropic cytokine that regulates diverse T and B cell responses including cell proliferation, survival and gene expression. Produced by mast cells, T cells and bone marrow stromal cells, IL-4 regulates the differentiation of naive CD4+ T cells into helper Th2 cells, characterized by their cytokine-secretion profile that includes secretion of IL-4, IL-5, IL-6, IL-10, and IL-13, which favor a humoral immune response. Another dominant function of IL-4 is the regulation of immunoglobulin class switching to the IgG1 and IgE isotypes. Excessive IL-4 production by Th2 cells has been associated with elevated IgE production and allergy. Recombinant murine IL-4 is a 13.5 kDa globular protein containing 120 amino acid residues.

BIOLOGICAL ACTIVITY:

The ED₅₀ determined by the dose-dependent stimulation of the proliferation of murine HT-2 cells is ≤2.0 ng/ml, corresponding to a specific activity of ≥5 x 10⁵ units/mg.

USAGE: For Research Purpose Only. Not to be used in humans.

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- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

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