

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

**CATALOG #:** 4139-10 10 µg  
4139-1000 1 mg

**LOT #:** \_\_\_\_\_

**SOURCE:** *E. coli*

**PURITY:** >98% by SDS-PAGE and HPLC analyses  
Endotoxin level is <0.1 ng per µg of IL-4.

**MOL. WEIGHT:** 14 kDa

**FORMULATION:** Lyophilized with no 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:

IL-4 is a potent lymphoid cell growth factor that stimulates the growth and survivability of certain B cells and T cells. Recombinant Rat IL-4 is a 14 kDa protein containing 121 amino acid residues.

### 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.

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

### RELATED PRODUCTS:

#### Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

#### Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

#### Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

#### Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

#### Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

#### Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

#### Molecular Biology & Reporter Assays

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- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β-Galactosidase Staining Kit & Luciferase Reporter Assay Kit

#### Growth Factors and Cytokines

#### Monoclonal and Polyclonal Antibodies