

## Recombinant Human GM-CSF

<b>CATALOG #:</b>	4100-10	10 µg
	4100-100	100 µg
	4100-1000	1 mg
<b>LOT #:</b>	_____	
<b>SOURCE:</b>	<i>E. coli</i>	
<b>PURITY:</b>	>98% by SDS-PAGE and HPLC analyses Endotoxin level is <0.1 ng per µg GM-CSF.	
<b>MOL. WEIGHT:</b>	14.6 kDa	
<b>FORM:</b>	Lyophilized from 10 mM Sodium Citrate, pH 3.5	

### RECONSTITUTION:

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

### STORAGE CONDITIONS:

The lyophilized human GM-CSF is best-stored desiccated below 0°C. Reconstituted GM-CSF should be stored in working aliquots at -20°C.

### DESCRIPTION:

Human GM-CSF (Granulocyte Macrophage Colony Stimulating Factor) is a potent species-specific stimulator of bone marrow cells. GM-CSF stimulates precursor cells of granulocytes, macrophages and eosinophils. The human and murine molecules are species-specific and exhibit no cross-species reactivity. Recombinant human GM-CSF is a 14.6 kDa globular protein containing 128 amino acid residues.

### BIOLOGICAL ACTIVITY:

The ED<sub>50</sub> determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is ≤0.1 ng/ml, corresponding to a specific activity of ≥1 x 10<sup>7</sup> units/mg.

**FOR RESEARCH USE ONLY! Not to be used on 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

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- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

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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