

## Recombinant Rat EGF

<b>CATALOG #:</b>	4024-20	20 µg
	4024-100	100 µg
	4024-1000	1 mg
<b>LOT #:</b>	_____	
<b>SYNONYMS:</b>	Urogastrone, URG, EGF	
<b>SOURCE:</b>	<i>E. coli</i>	
<b>PURITY:</b>	> 98 % by SDS-PAGE and RP-HPLC	
<b>FORM:</b>	Lyophilized from PBS, pH 7.4	

### RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in sterile ddH<sub>2</sub>O to a concentration ≥ 100 µg/ml. This solution can then be diluted into other aqueous buffer.

### STORAGE CONDITIONS:

The lyophilized protein is best-stored desiccated at -20°C. the reconstituted EGF should be stored at 4°C for 2-7 days. For long term storage it is recommended to add a carrier protein (0.1% HAS or BSA) and store as working aliquots at -20°C. Avoid freeze/thaw cycles.

### DESCRIPTION:

Epidermal growth factor has a profound effect on the differentiation of specific cells in vivo and is a potent mitogenic factor for a variety of cultured cells of both ectodermal and mesodermal origin. The EGF precursor is believed to exist as a membrane-bound molecule which is proteolytically cleaved to generate the 53-amino acid peptide hormone that stimulates cells to divide. EGF stimulates the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in cell culture. Epidermal Growth Factor Rat Recombinant produced in *E.Coli* is a single, non-glycosylated, polypeptide chain containing 53 amino acids and having a molecular mass of 6151 Dalton. The Rat EGF is purified by proprietary chromatographic techniques.

### AMINO ACID SEQUENCE:

NSNTGCPPSYDGYCLNGGVCMYVESVDYVVCNCVIGYIGERCQHRDLRWWKLR

### BIOLOGICAL ACTIVITY:

The ED<sub>50</sub> as calculated by the dose-dependant proliferation of murine BALB/c 3T3 cells is less than 0.1ng/ml, corresponding to a specific activity of > 1 x 10<sup>7</sup> units/mg.

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

### RELATED PRODUCTS:

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- 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

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- 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

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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
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#### Growth Factors and Cytokines

#### Monoclonal and Polyclonal Antibodies