



***Recombinant Rat EGF***  
*(Epidermal Growth Factor)*

**DATA SHEET**

*Catalog Number: 300-05*  
*Accession Number: P07522*

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***Specifications and Uses:***

**Alternate Names:** Urogastrone, URG

**Description:**

Epidermal Growth Factor (EGF) is a growth factor that stimulates the proliferation of epithelial and epidermal cells. EGF family members are characterized by three intramolecular disulfide bonds and can bind to four different receptor tyrosine kinases known as EGFR/ErbB1, ErbB2, ErbB3, and ErbB4. Recombinant rat EGF is a non-glycosylated protein, containing 54 amino acids, with a molecular weight of 6.3 kDa.

**Source:** *E.coli*

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation and Stability:**

Recombinant rat EGF is lyophilized from 10 mM Na<sub>2</sub>PO<sub>4</sub>, pH 7.5.

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

**Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

**Protein Content and Purity (typically ≥ 95%) determined by:**

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

**Endotoxin Level:**

Measured by kinetic LAL analysis and is typically ≤ 1 EU/μg protein.

**Biological Activity:**

The activity is determined by the dose-dependent proliferation of mouse BALB/c 3T3 cells and is typically less than 0.1 ng/mL.

**AA Sequence:**

MNSNTGCPPS YDGYCLNGGV CMYVESVDYR VCNCVIGYIG ERCQHRDLRW WKLR

**THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!**