

**BACKGROUND**

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 human EGF is a single, non-glycosylated protein containing 53 amino acids and having a molecular mass of 6.2 kDa.

**Alternative Names:**

Urogastrone, URG

**Amino Acid Sequence:**

NSDSECPLSH DGYCLHDGVC MYIEALDKYA CNCVVG YIGE  
RCQYRDLKWW ELR

**TECHNICAL INFORMATION**

**Source:** *E.coli*

**Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**

Recombinant human EGF is lyophilized with no additives.

**Stability:**

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 determined by:**

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Biological Activity:**

The activity is determined by the dose-dependent proliferation of murine BALB/c 3T3 cells and is typically between 20-100 pg/mL.

*Products are for research use only. They are not intended for human, animal, or diagnostic applications.*

