

## Certificate of Analysis (CoA)

### Recombinant Human EGF Animal-Free manufactured

**Catalog#** AF-100-15

**Lot#** 0425AF05

**Source:** *E.coli*

**Expiration Date:** December 2030

**Manufacturing Site:** Cranbury, NJ, USA

**Synonyms:** Epidermal Growth Factor, Urogastrone, URG

**Description:** EGF is a potent growth factor that stimulates the proliferation of various epidermal and epithelial cells. Additionally, EGF has been shown to inhibit gastric secretion, and to be involved in wound healing. EGF signals through a receptor known as c-erbB, which is a class I tyrosine kinase receptor. This receptor also binds with TGF- $\alpha$  and VGF (vaccinia virus growth factor). Recombinant Human EGF is a 6.2 kDa globular protein containing 53 amino acid residues, including 3 intramolecular disulfide bonds.

**Sequence:** NSDSECPLSH DGYCLHDGVC MYIEALDKYA CNCVVGYIGE RCQYRDLKWW ELR

### Storage & Handling:

**Handling:** Centrifuge vial prior to opening. Do not vortex after reconstitution. Avoid repeated freeze-thaw cycles.

**Reconstitution:** Initially reconstitute in water to 0.1-1.0 mg/ml. Store at 2°C to 8°C for up to 1 month or prepare for extended storage.

**Extended Storage:** After initial reconstitution, further dilute in a buffer containing a carrier protein or stabilizer (e.g. 5% Trehalose). Store working aliquots at -20°C to -80°C.

**Storage/Stability:**

Product Form	Temperature	Storage Time
Lyophilized	-20°C to -80°C	December 2030
Lyophilized	4°C	6 months
Lyophilized	Room Temperature	1 month
Reconstituted	2°C to 8°C	1 month
Extended Storage	-20°C to -80°C	12 months

### Specifications:

**Formulation:** Sterile filtered through a 0.2-micron filter. Lyophilized with no additives.

**Authenticity:** Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**Purity:**  $\geq 98\%$  by SDS-PAGE gel and HPLC analyses.

**Endotoxin:** Endotoxin level is  $< 0.01$  ng/ $\mu$ g of protein ( $< 0.1$  EU/ $\mu$ g).

**Protein Content:** Verified by UV Spectroscopy and/or SDS-PAGE gel.

**Biological Activity:** Determined by its ability to stimulate the proliferation of mouse Balb/c 3T3 cells. The expected  $ED_{50}$  is  $\leq 0.1$  ng/ml, corresponding to a specific activity of  $\geq 1 \times 10^7$  units/mg.

**Usage: Not for human use.**

Country of Origin: USA



Quality Assurance Representative