



## Human EGF, recombinant plant (test-size only)

### Human Epidermal Growth Factor, recombinant plant

Synonyms: Epidermal growth factor, Urogastrone, URG

*PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING*

Size	Order#	Lot#	Expiry Date
1 mg	1325.958.199		
1 g	1325.958.188		
50 g	1325.958.508		
1000 g	1325.958.107		

Please enquire for bulk quantities and other vial sizes.

### Description

Recombinant human Epidermal Growth Factor (EGF) is a 6 kDa globular protein containing 53 amino acid residues including 3 intramolecular disulfide-bonds. EGF is a potent growth factor, which 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). Biological activities ascribed to EGF include epithelial development, angiogenesis, inhibition of gastric acid secretion, fibroblast proliferation and colony formation of epidermal cells in culture.

- **Biological Activity**  $\geq 1.0 \times 10^6$  units/mg (BALB/c 3 T3);  $\geq 4.0 \times 10^5$  units/mg (NHDF)
- **Source** Oryza Sativa
- **Purity**  $\geq 98\%$  (SDS-PAGE),  $\geq 95\%$  (HPLC)
- **Endotoxin Level**  $\leq 1$  EU/mg (0.001 EU/ $\mu$ g)
- **Buffer** PBS (5 mM), NaCl (50 mM)\*
- **Physical State** Lyophilized

### Biological Activity

The ED<sub>50</sub> of  $\leq 1$  ng/ml was determined by its ability to stimulate the proliferation of mouse BALB/c 3 T3 cells. It corresponds to an activity of  $\geq 1.0 \times 10^6$  units/mg.

### Reconstitution

We recommend a quick spin followed by reconstitution in sterile filtered water to a concentration of 100-200  $\mu$ g/ml. **Do not vortex.** This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer and store in working aliquots at -20°C to -80°C.

### Stability

The lyophilized protein is stable at room temperature for up to 1 month and below -20°C until expiry date. Reconstituted protein is stable for at least 12 months when stored in working aliquots at -20°C to -80°C. **Please avoid repeated freeze-thaw cycles.**

### Amino Acid Sequence

NSDSECPLSH DGYCLHDGVC MYIEALDKYA CNCVVG YIGE RCQYRDLKWW ELR

**Usage:** For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

\*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

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