

## Human EGF (Yeast)

Human Epidermal Growth Factor, recombinant

Synonyms: Urogastrone, URG, EGF.

*PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING*

Size	Order #	Lot #	Expiry Date
100 µg	1325.953.100		
500 µg	1325.953.500		
1 mg	1325.953.199		

Please enquire for bulk quantities and other vial sizes

### Description

Recombinant human Epidermal Growth Factor (EGF) is a 6 kDa globular protein containing 51 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**  $\geq 1 \times 10^7$  units/mg
- **Source** Yeast, *Pichia pastoris*
- **Purity**  $\geq 98\%$  (SDS-PAGE, HPLC)
- **Endotoxin level**  $\leq 0.1\text{ng}/\mu\text{g}$  ( $\leq 1\text{EU}/\mu\text{g}$ )
- **Stabilizer** None
- **Buffer** PBS pH 7.4\*
- **Physical state** Sterile filtered, lyophilized

### Biological Activity

The ED<sub>50</sub> of  $\leq 1$  ng/ml was determined by the dose dependant proliferation (3H-Thymidien uptake) of murine BALB/c 3T3 cells. It corresponds to a specific activity of  $\geq 1 \times 10^7$  units/mg. This corresponds to an activity of  $\geq 2 \times 10^5$  units/mg in a NHDF assay.

### Reconstitution

We recommend a quick spin followed by reconstitution in sterile filtered water to a concentration of at least 100µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week and /or further diluted into other aqueous solutions. Working aliquots should be stored at -20°C to -80°C. For extended storage, especially at low concentrations we recommend to add 1% HSA ultra pure (order number [2835.958.xyz](#)).

### Stability

The lyophilized protein is stable at room temperature for up to 1 month, at 4°C for up to 6 months, and below -20°C until expiry date. Reconstituted protein is stable for at least 12 months when stored in working aliquots with a carrier at -20°C to -80°C. **Please avoid repeated freeze-thaw cycles.**

### Amino Acid Sequence

NSDSECPLSH DGYCLHDGVC MYIEALDKYA CNCVVG YIGE RCQYRDLKWW E

**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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