

Murine EGF

Murine Epidermal Growth Factor, recombinant; mouse Epidermal Growth Factor, recombinant

Synonyms: Murine Epidermal Growth Factor, Mouse Epidermal Growth Factor, Urogastrone, URG, EGF.

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
100 µg	1325.960.100		
500 µg	1325.960.500		
1 mg	1325.960.199		

Please enquire for bulk quantities and other vial sizes

Description

Recombinant murine Epidermal Growth Factor (mEGF) derived from *E. Coli* is a 6.0 kDA protein with 3 intramolecular disulfide-bonds containing 53 amino acids. EGF is a potent growth factor, which stimulates the proliferation of various epidermal and epithelial cells and some fibroblasts. 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- α 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** *E. Coli*
- **Purity** $\geq 98\%$ (SDS-PAGE, RP-HPLC)
- **Endotoxin level** $\leq 0.1\text{ng}/\mu\text{g}$ ($\leq 1\text{EU}/\mu\text{g}$)
- **Stabilizer** None
- **Buffer** None*
- **Physical state** Sterile filtered, lyophilized

Biological Activity

The ED₅₀ of $\leq 0.1\text{ng}/\text{ml}$ was determined by the dose dependent stimulation of the proliferation of murine BALB/c 3T3 cells. It corresponds to a specific activity of $\geq 1 \times 10^7$ units/mg.

Reconstitution

We recommend a quick spin followed by reconstitution in sterile 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. For long term storage, it is recommended to further dilute in a buffer - if possible - containing a carrier (0.1% HSA, order number: [2835.955.xyz](#) or [2835.958.xyz](#), or BSA, order number: [2835.919.xyz](#)) 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 with a carrier at -20°C to -80°C. **Please avoid repeated freeze-thaw cycles.**

Amino Acid Sequence

NSYPGCPSSY DGYCLNGGVC MHIESLDSYT CNCVIGYSGD RCQTRDLRWW 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.