

# Genaxxon BioScience

## rHuEGF

recombinant Human Epidermal Growth Factor from *E. coli*

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Product	Cat#	Package size
rHuEGF - rec. Human EGF	C6033.0100	100 µg
rHuEGF - rec. Human EGF	C6033.0500	500 µg
rHuEGF - rec. Human EGF	C6033.1000	1 mg

### Product description

Epidermal growth factor has a profound effect on the differentiation of specific cells in vivo and is a potent mitogenic factor for a variety of cultured cells of both ectodermal and mesodermal origin. EGF is believed to exist as a membrane bound molecule which is proteolytically cleaved to generate the 53 amino acid peptide hormone that stimulates cells to divide. EGF stimulated the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in cell culture.

Recombinant Human EGF produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 53 amino acids and having a molecular weight of 6222 Dalton. The rHuEGF is purified by proprietary chromatography techniques.

**Purity :** Greater than 98.0%, determined by :  
 RP-HPLC chromatography  
 IEX-FPLC chromatography  
 reducing and non-reducing SDS-PAGE (silver stained)

**Source:** *E. coli*

### Formulation

The protein was lyophilised from a concentrated (1mg/mL) sterile solution containing no additives.

### Solubility

It is recommended to reconstitute the lyophilized rHuEGF in sterile, deionised water not less than 100µg/mL, which can be further diluted to other concentrations.

### Stability

Lyophilised rHuEGF although stable at room temperature for 3 weeks, should be stored desiccated at - 20°C. Reconstituted rHuEGF is best stored refrigerated at +4°C between 2-7 days and at -20°C for long term storage. For long term storage it is recommended to add a carrier protein (e.g. 0.1% HSA or BSA). Please prevent repeated freeze-thaw cycles.

### Biological Activity

Genaxxon's rHuEGF is fully biologically active when compared to standards. The ED50, calculated by the dose-dependant proliferation of BALB/c 3T3 cells (measured by 3H-thymidine uptake) is 0.1 ng/mL, corresponding to a specific activity of 1x10<sup>7</sup> units/mg.

**Endotoxin:** less than 0.1 ng/mg (IEU/µg) of rHuEGF-b

### Amino acid sequence

The sequence of the first five N-terminal amino acids was determined to be Asn-Ser-Asp-Ser-Glu, which agrees with the sequence of native human EGF.

N-terminal methionine has been completely removed enzymatically.

### Usage

The Genaxxon rHuEGF is offered for research, laboratory or further manufacturing purposes.