

Analytical Data Sheet

Lot number	1000027941 not for drug use
Product number	4030572.0100
Catalog number	H-7490
Product	rec EGF (human)
Molecular Formula	C₂₇₀H₃₉₅N₇₃O₈₃S₇
Relative Molecular Mass	6216.01

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- α 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 CNCVVG YIGE RCQYRDLKWW ELR

Source: E.coli

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

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

Endotoxin: Endotoxin level is < 0.01 ng/ μ g of protein (< 0.1 EU/ μ 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 ED₅₀ is ≤ 0.1 ng/ml, corresponding to a specific activity of $\geq 1 \times 10^7$ units/mg.

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

Reconstitution: Centrifuge vial prior to opening. Reconstitute in water to 0.1-1.0 mg/ml. Do not vortex. Store at 2°C to 8°C for 1 week, or prepare for extended storage.

Storage/Stability: The lyophilized protein can be stored at -20°C to -80°C until December 2024, stored at 4°C for 6 months and stored at room temperature for 1 month. Reconstituted form at 2°C to 8°C for 1 week.

Extended storage: It is recommended to further dilute in a buffer containing a carrier protein (example 5% Trehalose) and store in working aliquots at -20°C to -80°C. Avoid repeated freeze-thaw cycles.

Usage: For research use only. Not for human use.