

EGF, Human

Cat. No.: Z02691-500

Size: 500.0 ug

Synonyms: Urogastrone, URG

Description:

Epidermal Growth Factor (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.

Recombinant human Epidermal Growth Factor (rhEGF) produced in *E. coli* is a non-glycosylated polypeptide chain of 54 amino acids. A fully biologically active molecule, rhEGF has a molecular mass of 6.2kDa analyzed by reducing SDS-PAGE and is obtained by proprietary refolding and chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 MNSDSECLPS HDGYCLHDGV CMYIEALDKY ACNCVVGYYG

00041 ERCQYRDLKW WELR

Source: *E. coli*

Species: Human

Biological Activity: ED₅₀ <0.6ng/ml, measured in a cell proliferation assay using Balb/3T3 mouse embryonic fibroblasts in serum-free medium and CellTiter-Glo cell viability assay, corresponding to a specific activity of >1.7 x 10⁶ units/mg.

Molecular Weight: 6.2kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against 10 mM PB, pH 7.0.

Reconstitution: Reconstituted in ddH₂O at 100 μ g/ml.

Purity: > 95% by SDS-PAGE analysis.

Endotoxin Level: Less than 0.1 ng/ μ g (1 EU/ μ g) determined by LAL test

Storage: Lyophilized recombinant human Epidermal Growth Factor (rhEGF) remains stable up to 12 months at lower than -70°C from date of receipt. Upon reconstitution, rhEGF should be stable up to 4 weeks at 4°C or up to 6 months at -20°C.