

EGF, Mouse

Cat. No.: Z02972-1

Size: 1.0 mg

Synonyms: Epidermal Growth Factor, Urogastrone, URG

Description:

Epidermal Growth Factor (EGF) was originally discovered in crude preparations of nerve growth factor prepared from mouse submaxillary glands as an activity that induced early eyelid opening, incisor eruption, hair growth inhibition, and stunting of growth when injected into newborn mice. 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 mouse Epidermal Growth Factor (rmEGF) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 54 amino acids. A fully biologically active molecule, rmEGF is obtained by proprietary chromatographic techniques at GenScript with a molecular mass of 6.2kDa analyzed by reducing SDS-PAGE.

Amino Acid Sequence:

00001 MNSYPGCPSS YDGYCLNGGV CMHIESLDSY TCNCVIGYSG
00041 DRCQTRDLRW WELR

Source: *E. coli*

Species: Mouse

Biological Activity: ED₅₀ < 0.1ng/ml, measured by a cell proliferation assay using BALB/c 3T3 cells, corresponding to a specific activity of > 1.0 \times 10⁷units/mg.

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

Formulation: Lyophilized after extensive dialysis against PBS.

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

Purity: > 95% by SDS-PAGE and HPLC analysis.

Endotoxin Level: < 0.2 EU/ μ g, determined by LAL method.

Storage: Lyophilized recombinant mouse Epidermal Growth Factor (rmEGF) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rmEGF should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.