PRODUCT INFORMATION

Expression system E.coli

Domain 971-1023aa

UniProt No. P01133

NCBI Accession No. NP_001954.2

Alternative Names Epidermal growth factor, Pro-epidermal growth factor, urogastrone, EGF

PRODUCT SPECIFICATION

Molecular Weight 6.3 kDa (54aa) confirmed by MALDI-TOF

Concentration 1mg/ml (determined by Bradford assay)

Formulation Liquid in. Phosphate-Buffered Saline (pH 7.4)

Purity > 95% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured in a cell proliferation assay using Balb/3T3 mouse embryonic fibroblast cells. The ED50 for this effect is less or equal to 0.1ng/ml.

Tag Non-Tagged

Application SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND



Description

Recombinant human epidermal growth factor (EGF) is a 6. 3 kDa globular protein containing 54 amino acids residues, including 3 intra-molecular disulfide bonds. 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. Recombinant EGF was expressed in E. coli and purified by conventional column chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.

Amino acid Sequence

MNSDSECPLS HDGYCLHDGV CMYIEALDKY ACNCVVGYIG ERCQYRDLKW WELR

General References

Riese., et al (1998) Bioessays. 20: 41-48. Cohen S., (1983) Cancer. 15: 1787-1791. Carpenter G., et al (1979) Annu. Rev. Biochem., 48: 193-216.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Biological Activity



Human EGF stimulates cell proliferation of the Balb/3T3 mouse embryonic fibroblast cells. The ED50 range is less or equal to 0.1 ng/ml.