

EGF, 971-1023 aa, Human, Recombinant, *E.coli*

Cat. No. IBEGF0501

Full name: Epidermal growth factor

NCBI Accession No.: NP_001954

Synonyms: Urogastrone

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.

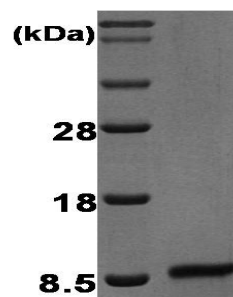
Form: Liquid. In Phosphate buffered saline (pH 7.4)

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

Purity: > 95% by SDS - PAGE

Concentration: 1 mg/ml (determined by Bradford assay)

Biological activity: The ED50 for this effect is < 0.89 ng/ml . Measured in a cell proliferation assay using mouse Balb3T3 cell.



15% SDS-PAGE (3ug)

Activity Assay

1. Cell line: Balb-3T3 (Mus musculus (mouse))
2. Maintenance Condition: RPMI 1640 containing 10% FBS
3. Assay medium - serum free RPMI 1640
4. Cell density: 2×10^4 cells/well (96 well plate, final volume 100ul)
5. Serum free starvation : 24hr with RPMI1640
6. Incubation time : 24 hr (after sample treatment)
7. Concentration range: 1 pg/ml - 1 ug/ml
8. Detection method : BrdU assay

Sequences of amino acids:

MNSDSECPLS HDGYCLHDGV CMYIEALDKY ACNCVVG YIG 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.

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



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