Leader in Biomolecular Solutions for Life Science

# **Recombinant Human EGF Protein**

Catalog No.: RP01556LQ Recombinant

Swiss Prot

P01133



### **Sequence Information**

Species Gene ID Human 1950

Tags

No tag

Synonyms

EGF;HOMG4;URG

## **Product Information**

Source	Purification
<i>Pichia</i>	> 95% by SDS-
	PAGE.

### Endotoxin

<0.1EU/µg

### Formulation

Supplied as a 0.22  $\mu$ m filtered solution in 20 mM tris,200 mM Nacl,pH 8.0. Contact us for customized product form or formulation.

#### Reconstitution

Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.

# Background

Epidermal growth factor (EGF) is the founding member of the EGF family that also includes TGF-alpha, amphiregulin (AR), betacellulin (BTC), epiregulin (EPR), heparin binding EGF like growth factor (HB x001e EGF), epigen, and the neuregulins (NRG)-1 through -6. Members of this protein family have highly similar structural and functional characteristics. The 1207 amino acid (aa) human EGF precursor contains 9 EGF domains and 9 LDLR class B repeats. Human EGF is a 645-Da protein with 53 amino acid residues and three intramolecular disulfide bonds. EGF is a growth factor that stimulates the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in cell culture. EGF is present in various body fluids, including blood, milk, urine, saliva, seminal fluid, pancreatic juice, cerebrospinal fluid, and amniotic fluid (4). Four ErbB (HER) family receptor tyrosine kinases including EGFR/ErbB1, ErbB2, ErbB3 and ErbB4, mediate responses to EGF family members (5). EGF binds ErbB1 and depending on the context, induces the formation of homodimers or heterodimers containing ErbB2. Dimerization results in autophosphorylation of the receptor at specific tyrosine residues to create docking sites for a variety of signaling molecules (5,?8). EGF seems regulated by dietary inorganic iodine and plays an important physiological role in the maintenance of oro-esophageal and gastric tissue integrity.

# **Basic Information**

### Description

Recombinant Human EGF Protein is produced by <I>Pichia</I> expression system. The target protein is expressed with sequence (Asn971-Arg1023) of human EGF (Accession #NP\_001954.2) fused with no additional amino acid.

### **Bio-Activity**

### Storage

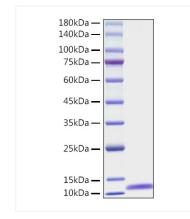
This product is stable at  $\leq$  -70°C for up to 1 year from the date of receipt.<br/>For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.<br/>Avoid repeated freeze/thaw cycles.

## Contact

Ð

www.abclonal.com

# Validation Data



Recombinant Human EGF Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 12kDa.