Leader in Biomolecular Solutions for Life Science

Recombinant Human EGF Protein

Catalog No.: RP01030 Recombinant



Sequence Information

Species Gene ID Swiss Prot Human 1950 P01133

Tags C-hFc&His

Synonyms EGF;HOMG4;URG

Product Information

Source Purification HEK293 cells > 90% by SDS-PAGE.

Endotoxin

< 0.1 EU/ μ g of the protein by LAL method.

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact



www.abclonal.com

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 x005f

Basic Information

Description

Recombinant Human EGF Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Asn 971-Arg 1023) of human EGF (Accession #NP 001954.2) fused with hFc, 6×His tag at the C-terminus.

Bio-Activity

1.Measured by its ability to stimulate EGF Receptor autophosphorylation in A431 cells.1-10 ng/mL of Recombinant Human EGF can effectively enhance EGF Receptor autophosphorylation.|2.Measured by its binding ability in a functional ELISA. Immobilized Human EGFR at 5 µg/mL (100 µL/well) can bind Human EGF with a linear range of 7-25 ng/mL. 3.Measured in a cell proliferation assay using BALB/c 3T3 mouse embryonic fibroblasts. The ED₅₀ for this effect is typically 0.065-0.26 ng/mL, corresponding to a specific activity of

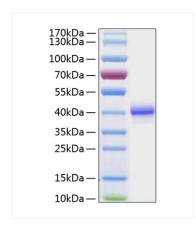
 $3.84 \times 10 < sup > 6 < / sup > -1.54 \times 10 < sup > 7 < / sup > units / mg.$

Storage

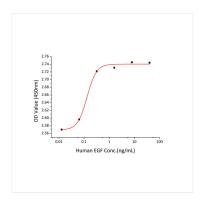
Store the lyophilized protein at -20 $^{\circ}$ C to -80 $^{\circ}$ C for long term.

Shr>After reconstitution, the protein solution is stable at -20 $^{\circ}$ C for 3 months, at 2-8 $^{\circ}$ C for up to 1 week. Avoid repeated freeze/thaw cycles.

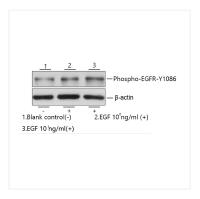
Validation Data



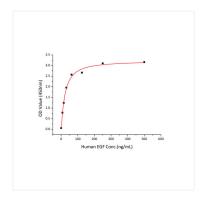
Recombinant Human EGF Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 40 kDa.



Recombinant Human EGF promotes the proliferation of BALB/c 3T3 mouse embryonic fibroblasts cells. The ED $_{50}$ for this effect is typically 0.065-0.26 ng/mL, corresponding to a specific activity of 3.84×10^6 - 1.54×10^7 units/mg.



Recombinant Human EGF enhances EGF Receptor autophosphorylation in A431 cells.1-10 ng/mL of Recombinant Human EGF can effectively enhance EGF Receptor autophosphorylation.



Immobilized Human EGFR at 5 μ g/mL (100 μ L/well) can bind Human EGF with a linear range of 7-25ng/mL.