

Epidermal Growth Factor (EGF) Active Protein | EGF active protein

Active Epidermal Growth Factor (EGF)

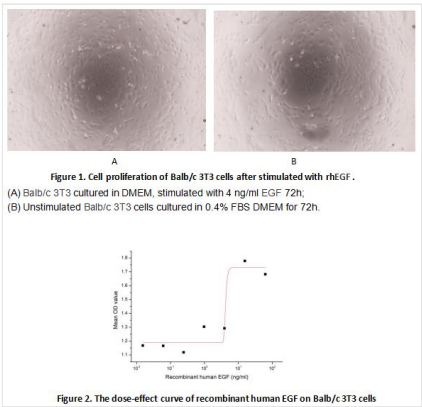
CATALOG # AAA161748	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Epidermal Growth Factor (EGF); Active Epidermal Growth Factor (EGF); Epidermal Growth Factor; URG; Beta-Urogastrone; Pro-epidermal growth factor4; EGF active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Asn971~Arg 1023
Applicable Applications for EGF active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	4.6
Research Area	Cytokine, Tumor immunity, Infection immunity
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

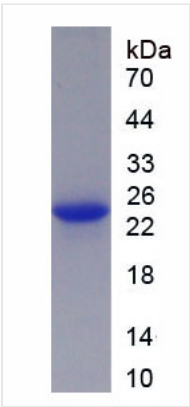


Bioactivity

Epidermal growth factor (EGF) is a growth factor that stimulates cell growth, proliferation, and differentiation by binding to its receptor EGFR. To test the effect of EGF on cell proliferation of 3T3 fibroblasts, Balb/c 3T3 cells were seeded into triplicate wells of 96-well plates at a density of 8, 000 cells/well and allowed to attach overnight, then the medium was replaced with 0.4% FBS standard DMEM prior to the addition of various concentrations of recombinant human EGF. After incubated for 48h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 ul of CCK-8 solution was added to each well of the plate, then measure the absorbance at 450 nm using a microplate reader after incubating the plate for 1-4 hours at 37 degree C. Cell proliferation of Balb/c 3T3 cells after incubation with rhEGF for 48h observed by inverted microscope was shown in Figure 1. The dose-effect curve of rhEGF was shown in Figure2. It was obvious that rhEGF significantly promoted cell proliferation of 3T3 cells. The ED50 for this effect is typically 4.2 ng/ml.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for EGF active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	251757262
NCBI GeneID	1950
UniProt Accession #	P01133; Q52LZ6; B4DRK7; E7EVD2; E9PBF0
Molecular Weight	1207
NCBI Official Full Name	Pro-epidermal growth factor
NCBI Official Synonym Full Names	epidermal growth factor
NCBI Official Symbol	EGF
NCBI Official Synonym Symbols	URG; HOMG4
NCBI Protein Information	pro-epidermal growth factor; beta-urogastrone
UniProt Protein Name	Pro-epidermal growth factor
UniProt Gene Name	EGF
UniProt Synonym Gene Names	EGF
UniProt Entry Name	EGF_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

