

Product datasheet

Recombinant human EGF protein (Active) ab259398

★★★★★ 2 Abreviews 4 Images

Description

Product name	Recombinant human EGF protein (Active)	
Biological activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by the dose-dependant Proliferation of BALB / 3T3 cells is 0.99 ng/mL corresponding to a Specific Activity of 1.01 x 10 ⁶ IU/mg.	
Purity	≥ 95 % SDS-PAGE. ≥ 95 % HPLC.	
Endotoxin level	< 0.005 Eu/μg	
Expression system	HEK 293 cells	
Accession	P01133	
Protein length	Full length protein	
Animal free	Yes	
Carrier free	Yes	
Nature	Recombinant	
Species	Human	
Sequence	NSDSECPLSHDGYCLHDGVCMYEALDKYACNCVVGYIGE RCQYRDLKWW ELR	
Predicted molecular weight	6 kDa	
Amino acids	971 to 1023	
Additional sequence information	N-terminal glycine. Full-length mature EGF chain.	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab259398** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	<ul style="list-style-type: none"> Mass Spectrometry HPLC SDS-PAGE Cell Culture Functional Studies
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Form	Lyophilized
Additional notes	This protein is filter sterilised prior to aliquoting and lyophilisation. All aliquoting and lyophilisation steps are performed in a sterile environment

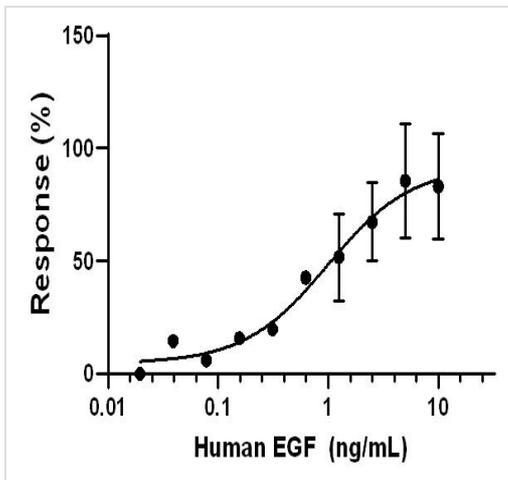
Preparation and Storage

Stability and Storage	Shipped at Room Temperature. Store at Room Temperature. Information available upon request. This product is an active protein and may elicit a biological response in vivo, handle with caution.
Reconstitution	Reconstitute with Phosphate Buffered saline.Reconstituted protein stable at -80C for 12 months or 4C for 1 week. Lyophilized contents may appear as either a translucent film or a white powder. This variance does not affect the quality of the product.

General Info

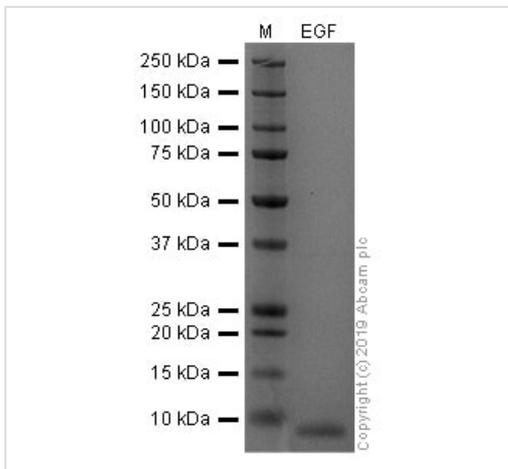
Function	EGF stimulates the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in cell culture. Magnesiotropic hormone that stimulates magnesium reabsorption in the renal distal convoluted tubule via engagement of EGFR and activation of the magnesium channel TRPM6. Can induce neurite outgrowth in motoneurons of the pond snail <i>Lymnaea stagnalis</i> in vitro (PubMed:10964941).
Tissue specificity	Expressed in kidney, salivary gland, cerebrum and prostate.
Involvement in disease	Hypomagnesemia 4
Sequence similarities	Contains 9 EGF-like domains. Contains 9 LDL-receptor class B repeats.
Post-translational modifications	O-glycosylated with core 1-like and core 2-like glycans. It is uncertain if Ser-954 or Thr-955 is O-glycosylated. The modification here shows glycan heterogeneity: HexHexNAc (major) and Hex2HexNAc2 (minor).
Cellular localization	Membrane.

Images



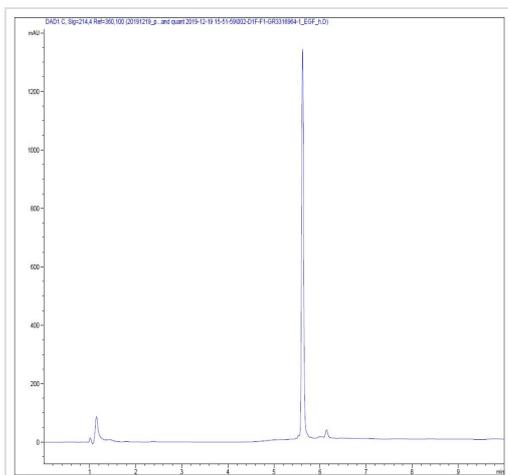
Functional Studies - Recombinant human EGF protein (Active) (ab259398)

Fully biologically active when compared to standard. The ED₅₀ as determined by the dose-dependant Proliferation of BALB / 3T3 cells is 0.99 ng/mL corresponding to a Specific Activity of 1.01 x 10⁶ IU/mg.



SDS-PAGE - Recombinant human EGF protein (Active) (ab259398)

SDS-PAGE analysis of ab259398.



HPLC - Recombinant human EGF protein (Active) (ab259398)

Purity: 97%

The spectrum was recorded using a 1260 Infinity II HPLC system with DAD and a MabPac RP column (3.0x100 mm, 4 μm). 5 μL of purified protein was injected and the gradient run from 80 % water:TFA (99.9:0.1 v/v) and 20 % acetonitrile:water:TFA (90:9.9:0.1 v/v/v) to 20 % water:TFA (99.9:0.1 v/v) and 80 % acetonitrile:water:TFA (90:9.9:0.1 v/v/v) within 3 minutes followed by an isocratic step for another 3 min. Flow rate was 0.5 mL/min and the column compartment temperature was 50 °C.

