

Product datasheet

Recombinant rat EGF protein (Animal Free) ab217470

Description

Product name	Recombinant rat EGF protein (Animal Free)	
Biological activity	The ED ₅₀ was determined by a cell proliferation assay using BALB/c 3T3 cells is ≤ 0.1 ng/ml, corresponding to a specific activity of ≥ 1 x 10 ⁷ units/mg.	
Purity	> 98 % SDS-PAGE. > 98 % by HPLC.	
Expression system	Escherichia coli	
Accession	P07522	
Protein length	Full length protein	
Animal free	Yes	
Nature	Recombinant	
Species	Rat	
Sequence	MNSNTGCPPS YDGYCLNGGV CMYVESVDRY VCNCVIGYIG ERCQHRDLRW WKLR	
Predicted molecular weight	6 kDa	
Amino acids	974 to 1026	
Additional sequence information	This product is for the mature full length protein. The signal peptide is not included.	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab217470** in the following tested applications.

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

Applications	SDS-PAGE HPLC Functional Studies
Form	Lyophilized

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. This product is an active protein and may elicit a biological response in vivo, handle with caution.
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Reconstitution

For lot specific reconstitution information please contact our Scientific Support Team.

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 *Lymnaea stagnalis* 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.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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