

ARG70304 Human EGF (pro) recombinant protein (Active) (Fc-His-tagged, C-ter)

Package: 100 µg

Store at: -20°C

Summary

Product Description	HEK293 expressed, Fc-His-tagged (C-ter) Active Human EGF (pro) recombinant protein.
Tested Reactivity	Hu
Tested Application	Binding, FuncSt, SDS-PAGE
Target Name	EGF (pro)
Species	Human
A.A. Sequence	Asn971 - Arg1023 of Human pro-EGF (NP_001954.2) with an Fc-6X His tag at the C-terminus.
Expression System	HEK293
Activity	Active
Activity Note	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. 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.
Alternate Names	Urogastrone; Pro-epidermal growth factor; URG; HOMG4; EGF

Application Instructions

Application Note	Binding activity test: Measured by its binding ability in a functional ELISA. Immobilized Human EGFR at 5 ug/ml (100 µl/well) can bind Human EGF with a linear range of 7-25ng/ml.
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Properties

Form	Powder
Purification Note	0.22 µm filter sterilized. Endotoxin level is < 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 90% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	Reconstitute to a concentration of 0.1 - 0.5 mg/ml in sterile distilled water.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C for up to one month, at 2-8°C for up to one week. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

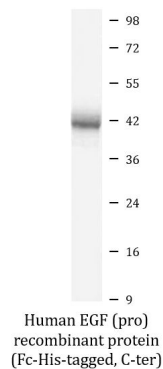
Bioinformation

Gene Symbol	EGF
Gene Full Name	epidermal growth factor
Background	This gene encodes a member of the epidermal growth factor superfamily. The encoded preproprotein

is proteolytically processed to generate the 53-amino acid epidermal growth factor peptide. This protein acts a potent mitogenic factor that plays an important role in the growth, proliferation and differentiation of numerous cell types. This protein acts by binding with high affinity to the cell surface receptor, epidermal growth factor receptor. Defects in this gene are the cause of hypomagnesemia type 4. Dysregulation of this gene has been associated with the growth and progression of certain cancers. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed. [provided by RefSeq, Jan 2016]

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). [UniProt]
Calculated Mw	134 kDa
PTM	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). [UniProt]
Cellular Localization	Membrane; Single-pass type I membrane protein. [UniProt]

Images



ARG70304 Human EGF (pro) recombinant protein (Active) (Fc-His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70304 Human EGF (pro) recombinant protein (Active) (Fc-His-tagged, C-ter).