

Datasheet for ABIN3111579

EGF Protein (AA 23-1207) (rho-1D4 tag)



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1 Image

Overview

Quantity:	1 mg
Target:	EGF
Protein Characteristics:	AA 23-1207
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EGF protein is labelled with rho-1D4 tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>PQHWSCPEGT LAGNGNSTCV GPAPFLIFSH GNSIFRIDTE GTNYEQLVVD AGVSVIMDFH</p> <p>YNEKRIYWVD LERQLLQRFV LNGSRQERVC NIEKNVSGMA INWINEEVIW SNQQEGIIITV</p> <p>TDMKGNNSHI LLSALKYPAN VAVDPVERFI FWSSEVAGSL YRADLDGVGV KALLETSEKI</p> <p>TAVSLDVLDK RLFWIQYNRE GSNSLICSCD YDGGSVHISK HPTQHNLFAM SLFGDRIFYS</p> <p>TWKMKTIWIA NKHTGKDMVR INLHSSFVPL GELKVHPLA QPKAEDDTWE PEQKLCKLRK</p> <p>GNCSSTVCGQ DLQSHLCMCA EGYALSRDRK YCEDVNECAF WNHGCTLGCK NTPGSYYCTC</p> <p>PVGFLVLLPDG KRCHQLVSCP RNVSECSHDC VLTSEGPLCF CPEGSVLERD GKTCSCGCSSP</p> <p>DNGGCSQLCV PLSPVSWECD CFPGYDLQLD EKSCAASGPQ PFLLFANSQD IRHMHFDGTD</p> <p>YGTLLSQQMG MVYALDHDPV ENKIYFAHTA LKWIERANMD GSQRERLIEE GVDVPEGLAV</p> <p>DWIGRRFYWT DRGKSLIGRS DLNGKRSKII TKENISQPRG IAVHPMAKRL FWTDTGINPR</p> <p>IESSSLQGLG RLVIASSDLI WPSGITIDFL TDKLYWCDAK QSVIEMANLD GSKRRRLTQN</p> <p>DVGHPFAVAV FEDYVWFSDW AMPSVMRVNK RTGKDRVRLQ GSMLKPSSLV VVHPLAKPGA</p>
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DPCLYQNGGC EHICKKRLGT AWCSCREGFM KASDGKTCLA LDGHQLLAGG EVDLKNQVTP
LDILSKTRVS EDNITESQHM LVAEIMVSDQ DDCAPVGCSM YARCISEGED ATCQCLKGFA
GDGKLCSDID ECEMGVPVCP PASSKCIINTE GGYVCRCSEG YQGDGIHCLD IDECQLGEHS
CGENASCTNT EGGYTCMCAG RLSEPLGICP DSTPPPHLRE DDHHSYVRNS DSECPLSHDG
YCLHDGVCMY IEALDKYACN CVVGYGIGERC QYRDLKWWEL RHAGHGQQQK VIVVAVCVVV
LVMLLLLSLW GAHYRTQKL LSKNPKNPYE ESSRDVRSRR PADTEDGMSS CPQPWFVVIK
EHQDLKNGGQ PVAGEDGQAA DGSMQPTSWR QEPQLCGMGT EQGCWIPVSS DKGSCPQVME
RSFHMPSTGT QTLEGGVEKP HSLLSANPLW QQRALDPPHQ MELTQ

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human EGF Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protParam tool to determine the absorption coefficient of each protein.

Purification:

Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:

1. Membrane proteins are fractionated by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.

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2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot.
3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin-free.

Grade: Crystallography grade

Target Details

Target: EGF

Alternative Name: EGF ([EGF Products](#))

Background: 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). {ECO:0000269|PubMed:10964941, ECO:0000269|PubMed:17671655}.

Molecular Weight: 132.8 kDa Including tag.

UniProt: [P01133](#)

Pathways: [NF-kappaB Signaling](#), [RTK Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Regulation of Carbohydrate Metabolic Process](#), [Hepatitis C](#), [Protein targeting to Nucleus](#), [Interaction of EGFR with phospholipase C-gamma](#), [Thromboxane A2 Receptor Signaling](#), [EGFR Downregulation](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be

Application Details

insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process