Datasheet for ABIN3136509

MUC4 Protein (AA 2719-3443) (rho-1D4 tag)

1 Image

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Overview

Quantity:	1 mg
Target:	MUC4
Protein Characteristics:	AA 2719-3443
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MUC4 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	PHITTLDNAN FTFNGLGDFL LVQAQDRNSS FLLEGRTAQT GTAKATNFIA FAAQYNTSSL KSPITVQWFL EPSDKIRVVY NNQTVAFNTR DTEVLPIFNT TGVLLTQNGS QVSANFDGTV TISVIARSNI LHASSSLSEE YRNHTEGLLG VWNDNPEDDF RMPNGSTIPS NSSEETLFFY GMTWHVNGTG LLGIRADPLP TKFTPIFLSQ LLNQSASGED LASGCKGDRK CMFDILATGN RTIGQSTNSI LNEFQHMNDT LNQYPPSINC SSKIQAYKGQ TVTTEITSNS KDATLSLSKK CSGFQLFENG SLQWTPTSPE ACTLEILARD VRTNLSWVLQ PKTVACFCSK EEQCLYNETS KEGNSSLEVT SCKCDGDTFG RLCERFKDPC DEPCFPNVNC IPGKGCEACP PNTTGDGRHC AALEDSCPNR SCPVNYCYNN GHCGISEAPG CQPTCTCPPA FADNRCFLAG NSFTPTISTE LPLRTIMLSL REDENASAAD VNASVANILE NLDMRAFFSN SLVELIRTSP GAQPSSKSIH HWKVTSHFKY RPRGPLIHYL NNQLIGAVME AFLLQARQER QKRSGEARKD VHFFPISRAD VQDQMALNLS MLEEYFTCDG YKGYHLVYSP QDGVTCVSPC SEGYCHNGGQ CKHLPDGPQC SCASFTIYTS SGKHCEHLSV KLGAFYGILF GTLGALLLLG ILAFMIFHFC GCSMNKFSYP LDSEL

Product Details

	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. • Mouse Muc4 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 receival 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 fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot. 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

Product Details

Endotoxin Level:	Protein is endotoxin-free.
Grade:	Crystallography grade

Target Details

Target:	MUC4
Alternative Name:	Muc4 (MUC4 Products)
Background:	May play a role in tumor progression. Ability to promote tumor growth may be mainly due to repression of apoptosis as opposed to proliferation. Has anti-adhesive properties. Seems to alter cellular behavior through both anti-adhesive effects on cell-cell and cell-extracellular matrix interactions and in its ability to act as an intramembrane ligand for ERBB2. Plays an important role in cell proliferation and differentiation of epithelial cells by inducing specific phosphorylation of ERBB2. The MUC4-ERBB2 complex causes site-specific phosphorylation of the ERBB2 "Tyr-1248'. In polarized epithelilal cells segragates ERBB2 and other ERBB receptors and prevents ERBB2 from acting as a coreceptor. The interaction with ERBB2 leads to enhanced expression of CDKN1B. The formation of a MUC4-ERBB2-ERBB3-NRG1 complex leads to down-regulation of CDKN1B, resulting in repression of apoptosis and stimulation of proliferation (By similarity). {ECO:0000250}.
Molecular Weight:	80.8 kDa Including tag.
UniProt:	Q8JZM8
Pathways:	Regulation of Leukocyte Mediated Immunity

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 gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be 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