Datasheet for ABIN3110278

ADCY3 Protein (AA 1-1144) (rho-1D4 tag)

1 Image

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Overview

Quantity:	1 mg
Target:	ADCY3
Protein Characteristics:	AA 1-1144
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADCY3 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	MPRNQGFSEP EYSAEYSAEY SVSLPSDPDR GVGRTHEISV RNSGSCLCLP RFMRLTFVPE SLENLYQTYF KRQRHETLLV LVVFAALFDC YVVVMCAVVF SSDKLASLAV AGIGLVLDII LFVLCKKGLL PDRVTRRVLP YVLWLLITAQ IFSYLGLNFA RAHAASDTVG WQVFFVFSFF ITLPLSLSPI VIISVVSCVV HTLVLGVTVA QQQQEELKGM QLLREILANV FLYLCAIAVG IMSYYMADRK HRKAFLEARQ SLEVKMNLEE QSQQQENLML SILPKHVADE MLKDMKKDES QKDQQQFNTM YMYRHENVSI LFADIVGFTQ LSSACSAQEL VKLLNELFAR FDKLAAKYHQ LRIKILGDCY YCICGLPDYR EDHAVCSILM GLAMVEAISY VREKTKTGVD MRVGVHTGTV LGGVLGQKRW QYDVWSTDVT VANKMEAGGI PGRVHISQST MDCLKGEFDV EPGDGGSRCD YLEEKGIETY LIIASKPEVK KTATQNGLNG SALPNGAPAS SKSSSPALIE TKEPNGSAHS SGSTSEKPEE QDAQADNPSF PNPRRRLRLQ DLADRVVDAS EDEHELNQLL NEALLERESA QVVKKRNTFL LSMRFMDPEM ETRYSVEKEK QSGAAFSCSC VVLLCTALVE ILIDPWLMTN YVTFMVGEIL LLILTICSLA AIFPRAFPKK LVAFSTWIDR TRWARNTWAM LAIFILVMAN

	VVDMLSCLQY YTGPSNATAG METEGSCLEN PKYYNYVAVL SLIATIMLVQ VSHMVKLTLM LLVAGAVATI NLYAWRPVFD EYDHKRFREH DLPMVALEQM QGFNPGLNGT DRLPLVPSKY SMTVMVFLMM LSFYYFSRHV EKLARTLFLW KIEVHDQKER VYEMRRWNEA LVTNMLPEHV ARHFLGSKKR DEELYSQTYD EIGVMFASLP NFADFYTEES INNGGIECLR FLNEIISDFD SLLDNPKFRV ITKIKTIGST YMAASGVTPD VNTNGFASSN KEDKSERERW QHLADLADFA LAMKDTLTNI NNQSFNNFML RIGMNKGGVL AGVIGARKPH YDIWGNTVNV ASRMESTGVM GNIQVVEETQ VILREYGFRF VRRGPIFVKG KGELLTFFLK GRDKLATFPN GPSVTLPHQV VDNS **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 ADCY3 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

Product Details

	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:	ADCY3
Alternative Name:	ADCY3 (ADCY3 Products)
Background:	Catalyzes the formation of the signaling molecule cAMP in response to G-protein signaling. Participates in signaling cascades triggered by odorant receptors via its function in cAMP biosynthesis. Required for the perception of odorants. Required for normal sperm motility and normal male fertility. Plays a role in regulating insulin levels and body fat accumulation in response to a high fat diet. {ECO:0000250|UniProtKB:Q8VHH7}.
Molecular Weight:	130.1 kDa Including tag.
UniProt:	O60266
Pathways:	EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Thyroid Hormone Synthesis, cAMP Metabolic Process, Myometrial Relaxation and Contraction, G-protein mediated Events, Interaction of EGFR with phospholipase C-gamma

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 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.

Application Details

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