Datasheet for ABIN3114449

ADCY1 Protein (AA 1-1119) (rho-1D4 tag)

1 Image

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Overview

Quantity:	1 mg
Target:	ADCY1
Protein Characteristics:	AA 1-1119
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADCY1 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys), ELISA

Product Details

Sequence:	MAGAPRGGGG GGGGAGEPGG AERAAGTSRR RGLRACDEEF ACPELEALFR GYTLRLEQAA TLKALAVLSL LAGALALAEL LGAPGPAPGL AKGSHPVHCV LFLALLVVTN VRSLQVPQLQ QVGQLALLFS LTFALLCCPF ALGGPARGSA GAAGGPATAE QGVWQLLLVT FVSYALLPVR SLLAIGFGLV VAASHLLVTA TLVPAKRPRL WRTLGANALL FVGVNMYGVF VRILTERSQR KAFLQARSCI EDRLRLEDEN EKQERLLMSL LPRNVAMEMK EDFLKPPERI FHKIYIQRHD NVSILFADIV GFTGLASQCT AQELVKLLNE LFGKFDELAT ENHCRRIKIL GDCYYCVSGL TQPKTDHAHC CVEMGLDMID TITSVAEATE VDLNMRVGLH TGRVLCGVLG LRKWQYDVWS NDVTLANVME AAGLPGKVHI TKTTLACLNG DYEVEPGYGH ERNSFLKTHN IETFFIVPSH RRKIFPGLIL SDIKPAKRMK FKTVCYLLVQ LMHCRKMFKA EIPFSNVMTC EDDDKRRALR TASEKLRNRS SFSTNVVYTT PGTRVNRYIS RLLEARQTEL EMADLNFFTL KYKHVEREQK YHQLQDEYFT SAVVLTLILA ALFGLVYLLI FPQSVVVLLL LVFCICFLVA CVLYLHITRV QCFPGCLTIQ IRTVLCIFIV VLIYSVAQGC VVGCLPWAWS SKPNSSLVVL SSGGQRTALP

	TLPCESTHHA LLCCLVGTLP LAIFFRVSSL PKMILLSGLT TSYILVLELS GYTRTGGGAV SGRSYEPIVA ILLFSCALAL HARQVDIRLR LDYLWAAQAE EEREDMEKVK LDNRRILFNL LPAHVAQHFL MSNPRNMDLY YQSYSQVGVM FASIPNFNDF YIELDGNNMG VECLRLLNEI IADFDELMEK DFYKDIEKIK TIGSTYMAAV GLAPTSGTKA KKSISSHLST LADFAIEMFD VLDEINYQSY NDFVLRVGIN VGPVVAGVIG ARRPQYDIWG NTVNVASRMD STGVQGRIQV TEEVHRLLRR CPYHFVCRGK VSVKGKGEML TYFLEGRTDG NGSQIRSLGL DRKMCPFGRA GLQGRRPPVC PMPGVSVRAG LPPHSPGQYL PSAAAGKEA **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 ADCY1 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:	ADCY1
Alternative Name:	ADCY1 (ADCY1 Products)
Background:	Catalyzes the formation of the signaling molecule cAMP in response to G-protein signaling. Mediates responses to increased cellular Ca(2+)/calmodulin levels (By similarity). May be involved in regulatory processes in the central nervous system. May play a role in memory and learning. Plays a role in the regulation of the circadian rhythm of daytime contrast sensitivity probably by modulating the rhythmic synthesis of cyclic AMP in the retina (By similarity). {ECO:0000250|UniProtKB:O88444, ECO:0000250|UniProtKB:P19754}.
Molecular Weight:	124.6 kDa Including tag.
UniProt:	Q08828
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

Application Details

	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

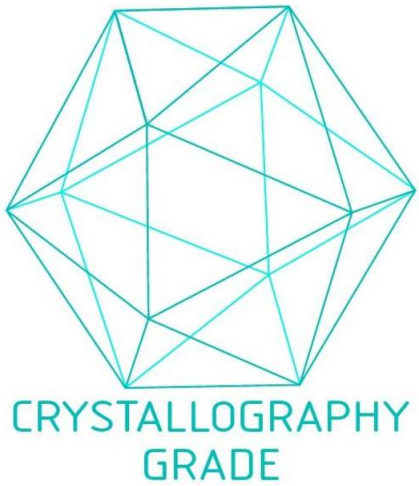

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process