

Datasheet for ABIN3134770

ADCY6 Protein (AA 1-1165) (rho-1D4 tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	ADCY6
Protein Characteristics:	AA 1-1165
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADCY6 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	MSWFSGLLV KVDERTAWG ERNGQKRPRH ANRASGFCAP RYMSCLKNAE PPSPTAAHT RCPWQDEAFI RRAGPGRGVE LGLRSVALGF DDTEVTTPMG TAEVAPDTSP RSGPSCWHRL VQVFQSKQFR SAKLERLYQR YFFQMNQSSL TLLMAVLVLL MAVLLTFHAA PAQPQPAYVA LLTCASVLFV VLMVVCNRHS FRQDSMWVVS YVVLGILAAV QVGGALAANP HSPSAGLWCP VFFVYITYTL LPIRMRAAVL SGLGLSTLHL ILAWQLNSSD PFLWKQLGAN VVLFLCTNAI GVCTHYPAEV SQRQAFQETR GYIARLHLQ HENRQERLL LSVLPQHVM EMKEDINTKK EDMMFHKIYI QKHDNVSILF ADIEGFTSLA SQCTAQELVM TLNELFARFD KLAENHCLR IKILGDCYYC VSGLPEARAD HAHCCVEMGV DMIEAISLVR EVTGVNVNMR VGIHSGRVHC GVLGLRKWQF DVWSNDVTLA NHMEAGGGRR IHITRATLQY LNGDYEVEPG RGGERNAYLK EQCIETFLIL GASQKRKEEK AMLAKLQRTTR ANSMEGLMPR WVPDRAFSRT KDSKAFRQMG IDDSSKDNRG AQDALNPEDE VDEFLGRAID ARSIDQLRKD HVRRFLLTFQ REDLEKKYSR KVDPRFGAYV ACALLVFCFI CFIQLLVFPY STLILGIYAA IFLLLLVTVL ICAVCSCGSF FPKALQRLSR
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NIVRSRVHST AVGIFSVLLV FISAIANMFT CNHTPIRTCA ARMLNLTPAD VTACHLQQLN
YSLGLDAPLC EGTAPTCSEF EYFVGNVLLS LCLASSVFLHI SSIGKLAMTF ILGFTYLVLL
LLGPPAAIFD NYDLLLLGVHG LASSNETFDG LDCPAVGRVA LKYMTPVILL VFALALYLHA
QQVESTARLD FLWKLQATGE KEEMEELQAY NRRLHNILP KDVAHFHFLAR ERRNDELYYQ
SCECVAVMFA SIANFSEFYV ELEANNEGVE CLRLNEIHA DFDEIISEER FRQLEKIKTI
GSTYMAASGL NASTYDQVGR SHITALADYA MRLMEQMKHI NEHSFNNFQM KIGLNMGPVV
AGVIGARKPQ YDIWGNTVNV SSRMDSTGVP DRIQVTTDLY QVLAAGGYQL ECRGVVVKVG
KGEMTTYFLN GGPSS

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 Adcy6 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.

Product Details

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: ADCY6

Alternative Name: Adcy6 ([ADCY6 Products](#))

Background: Catalyzes the formation of the signaling molecule cAMP downstream of G protein-coupled receptors (PubMed:18071070, PubMed:24363043). Functions in signaling cascades downstream of beta-adrenergic receptors in the heart and in vascular smooth muscle cells (PubMed:18071070). Functions in signaling cascades downstream of the vasopressin receptor in the kidney and has a role in renal water reabsorption (PubMed:20466003, PubMed:20864687). Functions in signaling cascades downstream of PTH1R and plays a role in regulating renal phosphate excretion (PubMed:24854272). Functions in signaling cascades downstream of the VIP and SCT receptors in pancreas and contributes to the regulation of pancreatic amylase and fluid secretion (PubMed:23753526). Signaling mediates cAMP-dependent activation of protein kinase PKA and promotes increased phosphorylation of various proteins, including AKT (PubMed:18071070, PubMed:23753526). Plays a role in regulating cardiac sarcoplasmic reticulum Ca(2+) uptake and storage, and is required for normal heart ventricular contractibility (PubMed:18071070). May contribute to normal heart function (PubMed:18071070, PubMed:20359598). Mediates vasodilatation after activation of beta-adrenergic receptors by isoproterenol (By similarity). Contributes to bone cell responses to mechanical stimuli (PubMed:20371630, PubMed:24277577). {ECO:0000250|UniProtKB:O43306, ECO:0000269|PubMed:1379717, ECO:0000269|PubMed:18071070, ECO:0000269|PubMed:20359598, ECO:0000269|PubMed:20371630, ECO:0000269|PubMed:20466003, ECO:0000269|PubMed:20864687, ECO:0000269|PubMed:23753526, ECO:0000269|PubMed:24277577,

Target Details

	ECO:0000269 PubMed:24363043, ECO:0000269 PubMed:24854272}.
Molecular Weight:	131.5 kDa Including tag.
UniProt:	Q01341
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:	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)



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