

Datasheet for ABIN3110379

**ADCY9 Protein (AA 1-1353) (Strep Tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	ADCY9
Protein Characteristics:	AA 1-1353
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADCY9 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

## Product Details

Sequence:	MASPPHQQLL HHHSTEVSCD SSGDSNSVRV KINPKQLSSN SHPKHCKYSI SSSCSSSGDS GGVPRRVGGG GRLRRQKKLP QLFERASSRW WDPKFDSVNL EEACLERCFP QTQRRFRYAL FYIGFACLLW SIYFAVHMRS RLIVMVAPAL CFLLCVGVFF LFTFTKLYAR HYAWTSLALT LLVFALTAA QFQVLTPVSG RGDSSNLTAT ARPTDTCLSQ VGSFSMCIEV LFLLYTVMHL PLYLSLCLGV AYSVLFFETFG YHFRDEACFP SPGAGALHWE LLSRGLLHGC IHAIGVHLFV MSQVRSRSTF LKVGQSIMHG KDLEVEKALK ERMIHSMVMPR IIADDLMKQG DEESENSVKR HATSSPKNRK KKSSIQKAPI AFRPFKMQOI EEVSILFADI VGFTKMSANK SAHALVGLLN DLFGRFDRLC EETKCEKIST LGDCYYCVAG CPEPRADHAY CCIEMGLGMI KAIEQFCQEK KEMVNMVRGV HTGTVLCGIL GMRRFKFDVW SNDVNLANLM EQLGVAGKVH ISEATAKYLD DRYEMEDGKV IERLGQSVVA DQLKGLKTYL ISGQRAKESR CSCAEALLSG FEVIDGSQVS SGPRGQGTAS SGNVSDLAQT VKTFDNLKTC PSCGITFAPK SEAGAEGGAP QNGCQDEHKN STKASGGPNP KTQNGLLSPP QEEKLTNSQT SLCEILQKEG RWAGVSLDQS ALLPLRFKNI
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REKTD AHFVD VIKEDSLMKD YFFKPPINQF SLNFLDQELE RSYRTSYQEE VIKNSPVKTF  
ASPTFSSLLD VFLSTTVFLT LSTTCFLKYE AATVPPPPAA LAVFSAALLL EVLSLAVSIR  
MVFFLEDVMA CTKRLLLEWIA GWLPRHCIGA ILVSLPALAV YSHVTSEYET NIHFPVFTGS  
AALIAVVHYC NFCQLSSWMR SSLATVVGAG PLLLLYVSLC PDSSVLTSPL DAVQNFSSER  
NPCNSSVPRD LRRPASLIGQ EVVLVFFLLL LLVWFLNREF EVSYRLHYHG DVEADLHRTK  
IQSMRDQADW LLRNIIPYHV AEQLKVSQTY SKNHDSGGVI FASIVNFSEF YEENYEGGKE  
CYRVLNELIG DFDELLSKPD YSSIEIKITI GATYMAASGL NTAQAQDGSH PQEHLQILFE  
FAKEMMRVVD DFNNNMLWFN FKLRVGFNHG PLTAGVIGTT KLLYDIWGDT VNIASRMDTT  
GVECRIQVSE ESYRVLSKMG YDFDYRGTVN VKGKGQMKTY LYPKCTDHRV IPQHQLSISP  
DIRVQVDGSI GRSPTDEIAN LVPSVQYVDK TSLGSDSSTQ AKDAHLSPKR PWKEPVKAE  
RGRFGKAIEK DDCDETGIEE ANELTKLNVS KSV

**Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

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### Characteristics:

#### Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

#### Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to

## Product Details

produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

### Concentration:

- 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.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):  1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

## Target Details

Target:	ADCY9
Alternative Name:	ADCY9 ( <a href="#">ADCY9 Products</a> )
Background:	Adenylate cyclase type 9 (EC 4.6.1.1) (ATP pyrophosphate-lyase 9) (Adenylate cyclase type IX) (ACIX) (Adenylyl cyclase 9) (AC9),FUNCTION: Adenylyl cyclase that catalyzes the formation of the signaling molecule cAMP in response to activation of G protein-coupled receptors (PubMed:9628827, PubMed:12972952, PubMed:15879435, PubMed:10987815). Contributes to signaling cascades activated by CRH (corticotropin-releasing factor), corticosteroids and beta-adrenergic receptors (PubMed:9628827). {ECO:0000269 PubMed:10987815, ECO:0000269 PubMed:12972952, ECO:0000269 PubMed:15879435, ECO:0000269 PubMed:9628827}.
Molecular Weight:	150.7 kDa
UniProt:	<a href="#">O60503</a>

## Target Details

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: ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

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