

Datasheet for ABIN3136744

## ADCY3 Protein (AA 1-1145) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	ADCY3
Protein Characteristics:	AA 1-1145
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADCY3 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p>MPRNQGFSDP EYSAEYSAEY SVSLPSDPDR GVGRTHEISV RNSGSCLCLP RFMRLTFVPE</p> <p>SLENLYQTYF KRQRHETLLV LVVFAALFDC YVVVMCAVVF SSDKLAPLMV AGFGLVLDII</p> <p>LFVLCKKGLL PDRVSRKVVP YLLWLLISAQ IFSYLGLNFS RAHAASDTVW WQAFFVFSFF</p> <p>ITLPLSLSPI VIISVVSCVV HTLVLGVTVA QQQQDELEGM QLLREILANV FLYLCAIIVG</p> <p>IMSYYMADRK HRKAFLEARQ SLEVKMNLEE QSQQQENLML SILPKHVADE MLKDMKKDES</p> <p>QKDQQQFNTM YMYRHENVSI LFADIVGFTQ LSSACSAQEL VKLLNELFAR FDKLAACYHQ</p> <p>LRIKILGDCY YCICGLPDYR EDHAVCSILM GLAMVEAISY VREKTKTGVD MRVGVHTGTV</p> <p>LGGVLGQKRW QYDVWSTDVT VANKMEAGGI PGRVHISQST MDCLKGEFDV EPGDGGSRCD</p> <p>YLDEKGIETY LIIASKPEVK KTAQNGLNGS AVPNGAPASS KPSSPALIET KEPNGSAHAS</p> <p>GSTSEEAEQ EAQADNPSFP NPRRRRLRLQD LADRVVDASE DEHELNQLLN EALLERESAQ</p> <p>VVKKRNTFLL TMRFMDPEME TRYSEVEKEQ SGAAFSCSCV VLFCTAMVEI LIDPWLMNTNY</p>

VTFVVGEVLL LILTICSMMA IFPRSFPPKKL VAFSSWIDRT RWARNTWAML AIFILVMANV  
VDMLSCLQYY MGPYNMTAGM ELDGGCMENP KYINYVAVLS LIATIMLVQV SHMVKLTML  
LVTGAVTALN LYAWCPVFDE YDHKRFQEKD SPMVALEKMQ VLATPGLNGT DSRLPLVPSK  
YSMTVMMFVM MLSFYFYSRH VEKLARTLFL WKIEVHDQKE RVYEMRRWNE ALVTNMLPEH  
VARHFLGSKK RDEELYSQSY DEIGVMFASL PNFADFYTEE SINNGGIECL RFLNEISDF  
DSLLDNPKFR VITKIKTIGS TYMAASGVTP DVNTNGFTSS SKEEKSDKER WQHLADLADF  
ALAMKDTLTN INNQSFNFM LRIGMNKGGV LAGVIGARKP HYDIWGNTVN VASRMESTGV  
MGNIQVVEET QVILREYGFR FVRRGPIFK GKGELLTFFL KGRDRPAAFP NGSSVTLPHQ VVDNP

**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 in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 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:

## Product Details

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification: One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

## Target Details

Target: ADCY3

Alternative Name: Adcy3 ([ADCY3 Products](#))

Background: Adenylate cyclase type 3 (EC 4.6.1.1) (ATP pyrophosphate-lyase 3) (Adenylate cyclase type III) (AC-III) (Adenylate cyclase, olfactive type) (Adenylyl cyclase 3) (AC3),FUNCTION: Catalyzes the formation of the signaling molecule cAMP in response to G-protein signaling (PubMed:9768837, PubMed:11055432, PubMed:25329148). Participates in signaling cascades triggered by odorant receptors via its function in cAMP biosynthesis (PubMed:9768837, PubMed:11055432). Required for the perception of odorants (PubMed:11055432). Required for normal sperm motility and normal male fertility (PubMed:15705663). Plays a role in regulating insulin levels and body fat accumulation in response to a high fat diet (PubMed:25329148). {ECO:0000269|PubMed:11055432, ECO:0000269|PubMed:15705663, ECO:0000269|PubMed:9768837}.

Molecular Weight: 129.1 kDa

UniProt: [Q8VHH7](#)

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.

## Application Details

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Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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Restrictions:	For Research Use only
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## Handling

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Format:	Liquid
Buffer:	<p>The buffer composition is at the discretion of the manufacturer.</p> <p>Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b></p>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months