

Datasheet for ABIN3134390

ADCY9 Protein (AA 1-1353) (Strep Tag)



Overview

| Quantity: | 250 μg | |
|-------------------------------|--|--|
| Target: | ADCY9 | |
| Protein Characteristics: | AA 1-1353 | |
| Origin: | Mouse | |
| Source: | Cell-free protein synthesis (CFPS) | |
| Protein Type: | Recombinant | |
| Purification tag / Conjugate: | This ADCY9 protein is labelled with Strep Tag. | |
| Application: | Western Blotting (WB), SDS-PAGE (SDS), ELISA | |

| Brand: | AliCE® |
|-----------|---|
| Sequence: | MASSPHQQLL HHHSTEVSCD SSGDSNSVRV KINPKQLSSN THPKHCKYSI SSSCSSSGDS |
| | GGLPRRVGGG GRLRRQKKLP QLFERASSRW WDPKFDSMNL EEACLERCFP QTQRRFRYAL |
| | FYVGFACLLW SIYFAVHMKS KVIVMVVPAL CFLVVCVGFF LFTFTKLYAR HYAWTSLALT |
| | LLVFALTLAA QFQVWTPLSG RVDSSNHTLT ATPADTCLSQ VGSFSICIEV LLLLYTVMQL |
| | PLYLSLFLGV VYSVLFETFG YHFRNEDCYP SPGPGALHWE LLSRALLHVC IHAIGIHLFV |
| | MSQVRSRSTF LKVGQSIMHG KDLEVEKALK ERMIHSVMPR IIADDLMKQG DEESENSVKR |
| | HATSSPKNRK KKSSIQKAPI AFRPFKMQQI EEVSILFADI VGFTKMSANK SAHALVGLLN |
| | DLFGRFDRLC EQTKCEKIST LGDCYYCVAG CPEPRADHAY CCIEMGLGMI KAIEQFCQEK |
| | KEMVNMRVGV HTGTVLCGIL GMRRFKFDVW SNDVNLANLM EQLGVAGKVH ISEATAKYLD |
| | DRYEMEDGRV IERLGQSVVA DQLKGLKTYL ISGQRAKESH CSCAEALLSG FEVIDDSRES |
| | SGPRGQGTAS PGSVSDLAQT VKTFDNLKTC PSCGITFAPK SEAGAEGGTV QNGCQDEPKT |

STKASGGPNS KTQNGLLSPP AEEKLTNSQT SLCEILQEKG RWAGVSLDQS ALLPLRFKNI
REKTDAHFVD VIKEDSLMKD YFFKPPINQF SLNFLDQELE RSYRTSYQEE VIKNSPVKTF
ASATFSSLLD VFLSTTVFLI LSITCFLKYG ATATPPPPAA LAVFGADLLL EVLSLIVSIR
MVFFLEDVMT CTKWLLEWIA GWLPRHCIGA ILVSLPALAV YSHITSEFET NIHVTMFTGS
AVLVAVVHYC NFCQLSSWMR SSLATIVGAG LLLLLHISLC QDSSIVMSPL DSAQNFSAQR
NPCNSSVLQD GRRPASLIGK ELILTFFLLL LLVWFLNREF EVSYRLHYHG DVEADLHRTK
IQSMRDQADW LLRNIIPYHV AEQLKVSQTY SKNHDSGGVI FASIVNFSEF YEENYEGGKE
CYRVLNELIG DFDELLSKPD YNSIEKIKTI GATYMAASGL NTAQCQEGGH PQEHLRILFE
FAKEMMRVVD DFNNNMLWFN FKLRVGFNHG PLTAGVIGTT KLLYDIWGDT VNIASRMDTT
GVECRIQVSE ESYRVLSKMG YDFDYRGTVN VKGKGQMKTY LYPKCTDNGV VPQHQLSISP
DIRVQVDGSI GRSPTDEIAN LVPSVQYSDK ASLGSDDSTQ AKEARLSSKR SWREPVKAEE

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.

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 posttranslational 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:

- · 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: | ADCY9 |
|-------------------|--|
| Alternative Name: | Adcy9 (ADCY9 Products) |
| Background: | Adenylate cyclase type 9 (EC 4.6.1.1) (ATP pyrophosphate-lyase 9) (Adenylate cyclase type IX) (Adenylyl cyclase 9) (AC9) (Adenylyl cyclase type 10) (ACTP10),FUNCTION: Adenylyl cyclase that catalyzes the formation of the signaling molecule cAMP in response to activation of G protein-coupled receptors. Contributes to signaling cascades activated by CRH (corticotropin-releasing factor), corticosteroids and by beta-adrenergic receptors. {ECO:0000250 UniProtKB:060503, ECO:0000269 PubMed:8662814}. |
| Molecular Weight: | 151.0 kDa |
| UniProt: | P51830 |
| 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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Restrictions:

For Research Use only

Handling

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