Datasheet for ABIN3111295

ADCY5 Protein (AA 1-1261) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	ADCY5
Protein Characteristics:	AA 1-1261
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADCY5 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MSGSKSVSPP GYAAQKTAAP APRGGPEHRS AWGEADSRAN GYPHAPGGSA RGSTKKPGGA VTPQQQQRLA SRWRSDDDDD PPLSGDDPLA GGFGFSFRSK SAWQERGGDD CGRGSRRQRR GAASGGSTRA PPAGGGGGSA AAAASAGGTE VRPRSVEVGL EERRGKGRAA DELEAGAVEG GEGSGDGGSS ADSGSGAGPG AVLSLGACCL ALLQIFRSKK FPSDKLERLY QRYFFRLNQS SLTMLMAVLV LVCLVMLAFH AARPPLQLPY LAVLAAAVGV ILIMAVLCNR AAFHQDHMGL ACYALIAVVL AVQVVGLLLP QPRSASEGIW WTVFFIYTIY TLLPVRMRAA VLSGVLLSAL HLAIALRTNA QDQFLLKQLV SNVLIFSCTN IVGVCTHYPA EVSQRQAFQE TRECIQARLH SQRENQQQER LLLSVLPRHV AMEMKADINA KQEDMMFHKI YIQKHDNVSI LFADIEGFTS LASQCTAQEL VMTLNELFAR FDKLAAENHC LRIKILGDCY YCVSGLPEAR ADHAHCCVEM GMDMIEAISL VREVTGVNVN MRVGIHSGRV HCGVLGLRKW QFDVWSNDVT LANHMEAGGK AGRIHITKAT LNYLNGDYEV EPGCGGERNA YLKEHSIETF LILRCTQKRK EEKAMIAKMN

RQRTNSIGHN PPHWGAERPF YNHLGGNQVS KEMKRMGFED PKDKNAQESA NPEDEVDEFL GRAIDARSID RLRSEHVRKF LLTFREPDLE KKYSKQVDDR FGAYVACASL VFLFICFVQI TIVPHSIFML SFYLTCSLLL TLVVFVSVIY SCVKLFPSPL QTLSRKIVRS KMNSTLVGVF TITLVFLAAF VNMFTCNSRD LLGCLAQEHN ISASQVNACH VAESAVNYSL GDEQGFCGSP WPNCNFPEYF TYSVLLSLLA CSVFLQISCI GKLVLMLAIE LIYVLIVEVP GVTLFDNADL LVTANAIDFF NNGTSQCPEH ATKVALKVVT PIIISVFVLA LYLHAQQVES TARLDFLWKL QATEEKEEME ELQAYNRRLL HNILPKDVAA HFLARERRND ELYYQSCECV AVMFASIANF SEFYVELEAN NEGVECLRLL NEIIADFDEI ISEDRFRQLE KIKTIGSTYM AASGLNDSTY DKVGKTHIKA LADFAMKLMD QMKYINEHSF NNFQMKIGLN IGPVVAGVIG ARKPQYDIWG NTVNVASRMD STGVPDRIQV TTDMYQVLAA NTYQLECRGV VKVKGKGEMM TYFLNGGPPL S

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 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!

Product Details

	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:	ADCY5
Alternative Name:	ADCY5 (ADCY5 Products)
Background:	Adenylate cyclase type 5 (EC 4.6.1.1) (ATP pyrophosphate-lyase 5) (Adenylate cyclase type V) (Adenylyl cyclase 5) (AC5),FUNCTION: Catalyzes the formation of the signaling molecule cAMP in response to G-protein signaling (PubMed:15385642, PubMed:26206488, PubMed:24700542). Mediates signaling downstream of ADRB1 (PubMed:24700542). Regulates the increase of free cytosolic Ca(2+) in response to increased blood glucose levels and contributes to the regulation of Ca(2+)-dependent insulin secretion (PubMed:24740569). {ECO:0000269|PubMed:15385642, ECO:0000269|PubMed:24700542, ECO:0000269|PubMed:24740569, ECO:0000269|PubMed:26206488}.
Molecular Weight:	138.9 kDa
UniProt:	O95622
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

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. 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