Datasheet for ABIN3110015

ADCY6 Protein (AA 1-1168) (Strep Tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	ADCY6
Protein Characteristics:	AA 1-1168
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADCY6 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence:	MSWFSGLLVP KVDERKTAWG ERNGQKRSRR RGTRAGGFCT PRYMSCLRDA EPPSPTPAGP PRCPWQDDAF IRRGGPGKGK ELGLRAVALG FEDTEVTTTA GGTAEVAPDA VPRSGRSCWR RLVQVFQSKQ FRSAKLERLY QRYFFQMNQS SLTLLMAVLV LLTAVLLAFH AAPARPQPAY VALLACAAAL FVGLMVVCNR HSFRQDSMWV VSYVVLGILA AVQVGGALAA DPRSPSAGLW CPVFFVYIAY TLLPIRMRAA VLSGLGLSTL HLILAWQLNR GDAFLWKQLG ANVLLFLCTN VIGICTHYPA EVSQRQAFQE TRGYIQARLH LQHENRQQER LLLSVLPQHV AMEMKEDINT KKEDMMFHKI YIQKHDNVSI LFADIEGFTS LASQCTAQEL VMTLNELFAR FDKLAAENHC LRIKILGDCY YCVSGLPEAR ADHAHCCVEM GVDMIEAISL VREVTGVNVN MRVGIHSGRV HCGVLGLRKW QFDVWSNDVT LANHMEAGGR AGRIHITRAT LQYLNGDYEV EPGRGGERNA YLKEQHIETF LILGASQKRK EEKAMLAKLQ RTRANSMEGL MPRWVPDRAF SRTKDSKAFR QMGIDDSSKD NRGTQDALNP EDEVDEFLSR AIDARSIDQL RKDHVRRFLL TFQREDLEKK YSRKVDPRFG AYVACALLVF CFICFIQLLI FPHSTLMLGI YASIFLLLLI TVLICAVYSC GSLFPKALQR

LSRSIVRSRA HSTAVGIFSV LLVFTSAIAN MFTCNHTPIR SCAARMLNLT PADITACHLQ QLNYSLGLDA PLCEGTMPTC SFPEYFIGNM LLSLLASSVF LHISSIGKLA MIFVLGLIYL VLLLLGPPAT IFDNYDLLLG VHGLASSNET FDGLDCPAAG RVALKYMTPV ILLVFALALY LHAQQVESTA RLDFLWKLQA TGEKEEMEEL QAYNRRLLHN ILPKDVAAHF LARERRNDEL YYQSCECVAV MFASIANFSE FYVELEANNE GVECLRLLNE IIADFDEIIS EERFRQLEKI KTIGSTYMAA SGLNASTYDQ VGRSHITALA DYAMRLMEQM KHINEHSFNN FQMKIGLNMG PVVAGVIGAR KPQYDIWGNT VNVSSRMDST GVPDRIQVTT DLYQVLAAKG YQLECRGVVK VKGKGEMTTY FLNGGPSS

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 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 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 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)

Target Details

Target:	ADCY6
Alternative Name:	ADCY6 (ADCY6 Products)
Background:	Adenylate cyclase type 6 (EC 4.6.1.1) (ATP pyrophosphate-lyase 6) (Adenylate cyclase type VI) (Adenylyl cyclase 6) (Ca(2+)-inhibitable adenylyl cyclase),FUNCTION: Catalyzes the formation of the signaling molecule cAMP downstream of G protein-coupled receptors (PubMed:17916776, PubMed:17110384). Functions in signaling cascades downstream of beta-adrenergic receptors in the heart and in vascular smooth muscle cells (PubMed:17916776). Functions in signaling cascades downstream of the vasopressin receptor in the kidney and has a role in renal water reabsorption. Functions in signaling cascades downstream of PTH1R and plays a role in regulating renal phosphate excretion. Functions in signaling cascades downstream of the VIP and SCT receptors in pancreas and contributes to the regulation of pancreatic amylase and fluid secretion (By similarity). Signaling mediates cAMP-dependent activation of protein kinase PKA. This promotes increased phosphorylation of various proteins, including AKT. Plays a role in regulating cardiac sarcoplasmic reticulum Ca(2+) uptake and storage, and is required for normal heart ventricular contractibility. May contribute to normal heart function (By similarity). Mediates vasodilatation after activation of beta-adrenergic receptors by isoproterenol (PubMed:17916776). Contributes to bone cell responses to mechanical stimuli (By similarity).

Target Details

	{ECO:0000250|UniProtKB:Q01341, ECO:0000250|UniProtKB:Q03343, ECO:0000269|PubMed:17110384, ECO:0000269|PubMed:17916776}.
Molecular Weight:	130.6 kDa
UniProt:	O43306
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.

Handling

Expiry Date:	Unlimited (if stored properly)