

# Datasheet for ABIN7551952 **ADCY6 Protein (AA 1-1168) (His tag)**



### Overview

Quantity:	1 mg
Target:	ADCY6
Protein Characteristics:	AA 1-1168
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADCY6 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Purpose:	Custom-made recombinat ADCY6 Protein expressed in mammalien cells.
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 Purification-Tag is based on experiences 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 to order protein from design to production by highly experienced protein experts.
- Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

#### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

#### Grade:

custom-made

#### 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). {ECO:0000250|UniProtKB:Q01341, ECO:0000250|UniProtKB:Q03343, ECO:0000269|PubMed:17110384, ECO:0000269|PubMed:17916776}.

Molecular Weight:

130.6 kDa

UniProt:

043306

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.
Restrictions:	For Research Use only

#### Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C

# Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months