

Datasheet for ABIN7551951 **ADCY1 Protein (AA 1-1119) (His tag)**



Overview

Quantity:	1 mg
Target:	ADCY1
Protein Characteristics:	AA 1-1119
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADCY1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Purpose:	Custom-made recombinat ADCY1 Protein expressed in mammalien cells.
Sequence:	MAGAPRGGGG GGGGAGEPGG AERAAGTSRR RGLRACDEEF ACPELEALFR GYTLRLEQAA
	TLKALAVLSL LAGALALAEL LGAPGPAPGL AKGSHPVHCV LFLALLVVTN VRSLQVPQLQ
	QVGQLALLFS LTFALLCCPF ALGGPARGSA GAAGGPATAE QGVWQLLLVT FVSYALLPVR
	SLLAIGFGLV VAASHLLVTA TLVPAKRPRL WRTLGANALL FVGVNMYGVF VRILTERSQR
	KAFLQARSCI EDRLRLEDEN EKQERLLMSL LPRNVAMEMK EDFLKPPERI FHKIYIQRHD
	NVSILFADIV GFTGLASQCT AQELVKLLNE LFGKFDELAT ENHCRRIKIL GDCYYCVSGL
	TQPKTDHAHC CVEMGLDMID TITSVAEATE VDLNMRVGLH TGRVLCGVLG LRKWQYDVWS
	NDVTLANVME AAGLPGKVHI TKTTLACLNG DYEVEPGYGH ERNSFLKTHN IETFFIVPSH
	RRKIFPGLIL SDIKPAKRMK FKTVCYLLVQ LMHCRKMFKA EIPFSNVMTC EDDDKRRALR
	TASEKLRNRS SFSTNVVYTT PGTRVNRYIS RLLEARQTEL EMADLNFFTL KYKHVEREQK
	YHQLQDEYFT SAVVLTLILA ALFGLVYLLI FPQSVVVLLL LVFCICFLVA CVLYLHITRV

QCFPGCLTIQ IRTVLCIFIV VLIYSVAQGC VVGCLPWAWS SKPNSSLVVL SSGGQRTALP
TLPCESTHHA LLCCLVGTLP LAIFFRVSSL PKMILLSGLT TSYILVLELS GYTRTGGGAV
SGRSYEPIVA ILLFSCALAL HARQVDIRLR LDYLWAAQAE EEREDMEKVK LDNRRILFNL
LPAHVAQHFL MSNPRNMDLY YQSYSQVGVM FASIPNFNDF YIELDGNNMG VECLRLLNEI
IADFDELMEK DFYKDIEKIK TIGSTYMAAV GLAPTSGTKA KKSISSHLST LADFAIEMFD
VLDEINYQSY NDFVLRVGIN VGPVVAGVIG ARRPQYDIWG NTVNVASRMD STGVQGRIQV
TEEVHRLLRR CPYHFVCRGK VSVKGKGEML TYFLEGRTDG NGSQIRSLGL DRKMCPFGRA
GLQGRRPPVC PMPGVSVRAG LPPHSPGQYL PSAAAGKEA 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:	ADCY1
Alternative Name:	ADCY1 (ADCY1 Products)
Background:	Adenylate cyclase type 1 (EC 4.6.1.1) (ATP pyrophosphate-lyase 1) (Adenylate cyclase type I)
	(Adenylyl cyclase 1) (Ca(2+)/calmodulin-activated adenylyl cyclase),FUNCTION: Catalyzes the

formation of the signaling molecule cAMP in response to G-protein signaling. Mediates		
responses to increased cellular Ca(2+)/calmodulin levels (By similarity). May be involved in		
regulatory processes in the central nervous system. May play a role in memory and learning.		
Plays a role in the regulation of the circadian rhythm of daytime contrast sensitivity probably by		
modulating the rhythmic synthesis of cyclic AMP in the retina (By similarity).		
{ECO:0000250 UniProtKB:088444, ECO:0000250 UniProtKB:P19754}.		

Molecular Weight:

123.4 kDa

UniProt:

Q08828

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