

Datasheet for ABIN7552028
ADCY8 Protein (AA 1-1251) (His tag)



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Overview

Quantity:	1 mg
Target:	ADCY8
Protein Characteristics:	AA 1-1251
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADCY8 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat ADCY8 Protein expressed in mammalian cells.
Sequence:	MELSDVRCLT GSEELYTIHP TPPAGDGRSA SRPQRLWQT AVRHITEQRF IHGHRGGSGS GSGGSGKASD PAGGGPNHHA PQLSGDSALP LYSLGPGERA HSTCGTKVFP ERSGSGSASG SGGGDLGFL HLDCAPSNSD FFLNGGYSYR GVIFPTLRNS FKSRDLERLY QRYFLGQRRK SEVVMNVLDV LTKLTLVLH LSLASAPMDP LKGILLGFFT GIEVVICALV VVRKDTSHT YLQYSGVVTW VAMTTQILAA GLGYGLLDG IGYVFTLFA TYSMLPLPLT WAILAGLGTS LLQVILQVVI PRLAVISINQ VVAQAVLFMC MNTAGIFISY LSDRAQRQAF LETRRCVEAR LRLETENQRQ ERLVLSVLPR FVVLEMINDM TNVEDEHLQH QFHRIYHRY ENVSILFADV KGFTNLSTTL SAQELVRMLN ELFARFDRLA HEHHCLRIKI LGDCYYCVSG LPEPRQDHAH CCVEMGLSMI KTIRYVRSRT KHDVDMRIGI HSGSVLCGVL GLRKWQFDVW SWDVDIANKL ESGGIPGRIH ISKATLDCLN GDYNVEEGHG KERNEFLRKH NIETYLIKQP EDSLLSLPED IVKESVSSSD RRNSGATFTE GSWPELPFD NIVGKQNTLA ALTRNSINLL PNHLAQLHV

QSGPEEINKR IEHTIDLRSG DKLRREHIKP FSLMFKDSSL EHKYSQMRDE VFKSNLVCAF
IVLLFITAIQ SLLPSSRVMP MTIQFSILIM LHSALVLITT AEDYKCLPLI LRKTCCWINE TYLARNVIIF
ASILINFLGA ILNILWCDFD KSIPLKNLTF NSSAVFTDIC SYPEYFVFTG VLAMVTCAVF
LRLNSVLKLA VLLIMIAIYA LLTETVYAGL FLRYDNLNHS GEDFLGTKEV SLLLMAMFLL
AVFYHGQQL EYTARLDFLWR VQAKEEINEM KELREHNENM LRNILPSHVA RHFLEKDRDN
EELYSQSYDA VGVMFASIPG FADFYSQTEM NNQGVECLRL LNEIADFDE LLGEDRFQDI
EKIKTIGSTY MAVSGLSPEK QQCEDKWGHL CALADFSLAL TESIQEINKH SFNNFELRIG
ISHGSSVAGV IGAKKPQYDI WGKTVNLASR MDSTGVSGRI QVPEETYLIL KDQGFAFDYR
GEIYVKGISE QEGKIKTYFL LGRVQPNPFI LPPRRLPGQY SLAAVVLGLV QSLNRQRQKQ
LLNENNNTGI IKGHYNRRTL LSPSGTEPGA QAEGTDKSDL P **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 mammalian 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:

ADCY8

Alternative Name:

ADCY8 ([ADCY8 Products](#))

Target Details

Background: Adenylate cyclase type 8 (EC 4.6.1.1) (ATP pyrophosphate-lyase 8) (Adenylate cyclase type VIII) (Adenylyl cyclase 8) (AC8) (Ca(2+)/calmodulin-activated adenylyl cyclase),FUNCTION: Catalyzes the formation of cAMP in response to calcium entry leading to cAMP signaling activation that affect processes such as synaptic plasticity and insulin secretion. Plays a role in many brain functions, such as learning, memory, drug addiction, and anxiety modulation through regulation of synaptic plasticity by modulating long-term memory and long-term potentiation (LTP) through CREB transcription factor activity modulation. Plays a central role in insulin secretion by controlling glucose homeostasis through glucagon-like peptide 1 and glucose signaling pathway and maintains insulin secretion through calcium-dependent PKA activation leading to vesicle pool replenishment. Also, allows PTGER3 to induce potentiation of PTGER4-mediated PLA2 secretion by switching from a negative to a positive regulation, during the IL1B induced-dedifferentiation of smooth muscle cells. {ECO:0000250|UniProtKB:P40146}.

Molecular Weight: 140.1 kDa

UniProt: [P40145](#)

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