

Datasheet for ABIN3088501
ADCY6 Protein (AA 1-151) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	ADCY6
Protein Characteristics:	AA 1-151
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADCY6 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>MSWFSGLLVP KVDERKTAWG ERNGQKRSRR RGTRAGGFCT PRYMSCLRDA EPPSPTPAGP PRCPWQDDAF IRRGGPGK GK ELGLRAVALG FEDTEVTTTA GGTAEVAPDA VPRSGRSCWR RLVQVFQSKQ FRSAKLERLY QRYFFQMNQS S</p> <p>Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.</p>
Characteristics:	<ul style="list-style-type: none">• Made in Germany - from design to production - by highly experienced protein experts.• Human ADCY6 Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade.• State-of-the-art algorithm used for plasmid design (Gene synthesis). <p>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.</p> <p>The big advantage of ordering our made-to-order proteins in comparison to ordering custom</p>

Product Details

made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:	<p>Two step purification of proteins expressed in bacterial culture:</p> <ol style="list-style-type: none">1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Endotoxin has not been removed. Please contact us if you require endotoxin removal.
Grade:	Crystallography grade

Target Details

Target:	ADCY6
Alternative Name:	ADCY6 (ADCY6 Products)
Background:	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

Target Details

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 contractility. 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: 17.9 kDa Including tag.

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: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 100 mM NaCl, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Handling

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process