

Datasheet for ABIN7554906 **PDE9A Protein (AA 1-593) (His tag)**



Overview

Quantity:	1 mg
Target:	PDE9A
Protein Characteristics:	AA 1-593
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PDE9A protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Purpose:	Custom-made recombinat PDE9A Protein expressed in mammalien cells.
Sequence:	MGSGSSSYRP KAIYLDIDGR IQKVIFSKYC NSSDIMDLFC IATGLPRNTT ISLLTTDDAM
	VSIDPTMPAN SERTPYKVRP VAIKQLSAGV EDKRTTSRGQ SAERPLRDRR VVGLEQPRRE
	GAFESGQVEP RPREPQGCYQ EGQRIPPERE ELIQSVLAQV AEQFSRAFKI NELKAEVANH
	LAVLEKRVEL EGLKVVEIEK CKSDIKKMRE ELAARSSRTN CPCKYSFLDN HKKLTPRRDV
	PTYPKYLLSP ETIEALRKPT FDVWLWEPNE MLSCLEHMYH DLGLVRDFSI NPVTLRRWLF
	CVHDNYRNNP FHNFRHCFCV AQMMYSMVWL CSLQEKFSQT DILILMTAAI CHDLDHPGYN
	NTYQINARTE LAVRYNDISP LENHHCAVAF QILAEPECNI FSNIPPDGFK QIRQGMITLI
	LATDMARHAE IMDSFKEKME NFDYSNEEHM TLLKMILIKC CDISNEVRPM EVAEPWVDCL
	LEEYFMQSDR EKSEGLPVAP FMDRDKVTKA TAQIGFIKFV LIPMFETVTK LFPMVEEIML
	QPLWESRDRY EELKRIDDAM KELQKKTDSL TSGATEKSRE RSRDVKNSEG DCA 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

PDE9A

Alternative Name:

PDE9A (PDE9A Products)

Background:

High affinity cGMP-specific 3',5'-cyclic phosphodiesterase 9A (EC 3.1.4.35),FUNCTION: Specifically hydrolyzes the second messenger cGMP, which is a key regulator of many important physiological processes. Highly specific: compared to other members of the cyclic nucleotide phosphodiesterase family, has the highest affinity and selectivity for cGMP (PubMed:9624146, PubMed:18757755, PubMed:21483814). Specifically regulates natriuretic-peptide-dependent cGMP signaling in heart, acting as a regulator of cardiac hypertrophy in myocytes and muscle. Does not regulate nitric oxide-dependent cGMP in heart (PubMed:25799991). Additional experiments are required to confirm whether its ability to hydrolyze natriuretic-peptide-dependent cGMP is specific to heart or is a general feature of the protein (Probable). In brain, involved in cognitive function, such as learning and long-term memory (By similarity). {ECO:0000250|UniProtKB:Q8QZV1, ECO:0000269|PubMed:18757755,

Target Details

Expiry Date:

12 months

Target Details	
	ECO:0000269 PubMed:21483814, ECO:0000269 PubMed:25799991,
	ECO:0000269 PubMed:9624146, ECO:0000305}.
Molecular Weight:	68.5 kDa
UniProt:	076083
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.