

Datasheet for ABIN3114647

## PDE3B Protein (AA 1-1112) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	PDE3B
Protein Characteristics:	AA 1-1112
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PDE3B protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	<p>MRRDERDAKA MRSLQPPDGA GSPPESLRNG YVKSCVSPLR QDPPRGFFFH LCRFCNVELR</p> <p>PPPASPQQR RCSPFCRARL SLGALAAFVL ALLLGAEPES WAAGAAWLRT LLSVCSHSLS</p> <p>PLFSIACAFF FLTCLTRTK RGPGRSCG SWWLLALPAC CYLGDFLVWQ WWSWPWGDGD</p> <p>AGSAAPHTPP EAAAGRLLLV LSCVGLLLTL AHPLRLRHCV LVLLLASFWV WVSFTSLGSL</p> <p>PSALRPLLSG LVGGAGCLLA LGLDHFFQIR EAPLHPRLSS AAEEKVPVIR PRRRSSCVSL</p> <p>GETAASYGGS CKIFRRPSLP CISREQMILW DWDLKQWYKP HYQNSGGGNG VDLSVLNEAR</p> <p>NMVSDLLTDP SLPPQVISSL RSISSLMGAF SGSCRPKINP LTPFPGFYPC SEIEDPAEKG</p> <p>DRKLNKGLNR NSLPTQLRR SSGTSGLLPV EQSSRWDRNN GKRPHQEFGI SSQGCYLNPG</p> <p>FNSNLLTIK QRSSSVSLTH HVGLRRAGVL SSLSPVNSSN HGPVSTGSLT NRSPIEFPDT</p> <p>ADFLNKPSVI LQRSLGNAPN TPDFYQQLRN SDSNLCNSCG HQMLKYVSTS ESDGTDCCSG</p> <p>KSGEEENIFS KESFKLMETQ QEEETEEKDS RKLFEQGDKW LTEEAQSEQQ TNIEQEVSLD</p>

LILVEEYDSL IEKMSNWNFP IFELVEKMGE KSGRILSQVM YTLFQDTGLL EIFKIPTQQF  
MNYFRALENG YRDIPYHNRI HATDVLHAVW YLTTRPVPLG QQIHNGCGTG NETDSDGRIN  
HGRIAYISSK SCSNPDESYG CLSSNIPALE LMALYVAAAM HDYDHPGRTN AFLVATNAPQ  
AVLYNDRSVL ENHHAASAWN LYLSRPEYNF LLHLDHVEFK RFRFLVIEAI LATDLKKHFD  
FLAEFNAKAN DVNSNGIEWS NENDRLLVCQ VCIKLADING PAKVRDLHLK WTEGIVNEFY  
EQGDDEANLG LPISPFMDRS SPQLAKLQES FITHIVGPLC NSYDAAGLLP GQWLEAEEDN  
DTESGDDEDG EELDTEDEEM ENNLNPKPPR RKSRRRIFCQ LMHHLTENHK IWKEIVEEEE  
KCKADGNKLQ VENSSLPQAD EIQVIEEAE EE

**Sequence without tag. The proposed Strep-Tag is based on experience s 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.**

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### Characteristics:

#### Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

#### Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

#### Concentration:

## Product Details

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification: One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALICE®).

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

## Target Details

Target: PDE3B

Alternative Name: PDE3B ([PDE3B Products](#))

Background: CGMP-inhibited 3',5'-cyclic phosphodiesterase 3B (EC 3.1.4.17) (CGIPDE1) (CGIP1) (Cyclic GMP-inhibited phosphodiesterase B) (CGI-PDE B),FUNCTION: Cyclic nucleotide phosphodiesterase with a dual-specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological process (PubMed:14592490, PubMed:21393242). Regulates angiogenesis by inhibiting the cAMP-dependent guanine nucleotide exchange factor RAPGEF3 and downstream phosphatidylinositol 3-kinase gamma-mediated signaling (PubMed:21393242). Controls cardiac contractility by reducing cAMP concentration in cardiocytes (By similarity). {ECO:0000250|UniProtKB:Q61409, ECO:0000269|PubMed:14592490, ECO:0000269|PubMed:21393242}.

Molecular Weight: 124.3 kDa

UniProt: [Q13370](#)

Pathways: [Negative Regulation of Hormone Secretion](#), [Carbohydrate Homeostasis](#), [cAMP Metabolic Process](#)

## 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: ALICE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce

Application Details

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Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months