

# Datasheet for ABIN3132127 **PDE8A Protein (AA 1-823) (Strep Tag)**

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Quantity:	250 μg
Target:	PDE8A
Protein Characteristics:	AA 1-823
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PDE8A protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MGCAPSIHTS ENRTFSHSDG EDEDVDVDVP GPAPRSIQRW STAPGLVEPQ PRDNGASKVS
	VADVQFGPMR FHQDQLQVLL VFTKEDSQCN GFHRACEKAG FKCTVTKEVQ TVLTCFQDKL
	HDIIIIDHRY PRQMDAETLC RSIRSSKFSE NTVIVGVVRR VDKEESSLMP FLAAGFTRRF
	IENPNVMACY NELLQLACGE VRSQLKLRAC NSVFTALEKS QEAIEITSED HIIQYANPAF
	ESTMGYQSGE LIGKELAQVP INEKKGDLLD AINSCVTVDK EWQGVYHTQK KNGDNIQQNV
	KIIPVIGQGG KIRHYVSIIR VCNGNNKVET TTECVQTDSQ TDNQAGKHKD RRKHSMDAKA
	VSSRTSDVSS QRRHSSLARI HSMMIEAPIT KVINIINAAQ ENSPVPVTEA LNRVLDILRT
	TELYSPQFNA QDDPHATDLV GGLMSDGLRR FSGNEYILAT KNLPPLSNNL ATPVSLHDVP
	PRIALAIENE EQWDFDIFEL EVATQNRPLI YLGLKTFARF GMCEFLQCSE TTLRSWFQMI
	ESNYHSSNPY HNSTHAADVL HATAYFLSRD KIKETLDRID EVAALIAATV HDVDHPGRTN
	SFLCNAGNQL AVLYNDTAVL ESHHVALAFQ LTLENDQCNI FKQMERNDYR TLRQSIIDMV

LATEMTKHFE HVNKFINSIN KPLTAQESEE PDRSLEDIKA MLKTPESRAL IKRMMIKCAD VSNPCRPLEH CIEWAARISE EYFSQTDEEK QLDLPVVMPV FDRNTCSIPK SQISFIDYFI TDMFDAWDAF VDLPNLMOHL DDNFRYWKGL DEKKLRSLRP PPE

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.

#### 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 posttranslational 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:

- 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

## **Product Details**

Product Details	
	System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made
Target Details	
Target:	PDE8A
Alternative Name:	Pde8a (PDE8A Products)
Background:	High affinity cAMP-specific and IBMX-insensitive 3',5'-cyclic phosphodiesterase 8A (MmPDE8) (EC 3.1.4.53),FUNCTION: Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes. May be involved in maintaining basal levels of the cyclic nucleotide and/or in the cAMP regulation of germ cell development. Binding to RAF1 reduces RAF1 'Ser-259' inhibitory-phosphorylation and stimulates RAF1-dependent EGF-activated ERK-signaling. Protects against cell death induced by hydrogen peroxide and staurosporine. {ECO:0000250 UniProtKB:060658}.
Molecular Weight:	93.2 kDa
UniProt:	088502
Pathways:	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 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!

## **Application Details**

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