

Datasheet for ABIN3094409

PDE4B Protein (AA 1-736) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	PDE4B
Protein Characteristics:	AA 1-736
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PDE4B protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MKKSRSVMTV MADDNVKDYF ECSLSKSYSS SSNTLGIDLW RGRRC CSGNL QLPPLSQRQS</p> <p>ERARTPEGDG ISRPTTLPLT TLP SIAITTV SQECFDVENG PSPGRSP LDP QASSSAGLVL</p> <p>HATFPGHSQR RESFLYRSDS DYDLSPKAMS RNSSLPSEQH GDDLIVTPFA QVLASLRSVR</p> <p>NNFTILTNLH GTSNKRSPAA SQPPVSRVNP QEESYQKLAM ETL EELDWCL DQLETIQTYR</p> <p>SVSEMASNKF KRMLNRELTH LSEMSRSGNQ VSEYISNTFL DKQNDVEIPS PTQKDREKKK</p> <p>KQQLMTQISG VKKLMHSSSL NNTSISRFGV NTENEDHLAK ELEDLNKWGL NIFNVAGYSH</p> <p>NRPLTCIMYA IFQERDLLKT FRISDFTIT YMMTLEDHYH SDVAYHNSLH AADVAQSTHV</p> <p>LLSTPALDAV FTDLEILAAI FAAAHDVDH PGVSNQFLIN TNS ELALMYN DESVLENHHL</p> <p>AVGFKLLQEE HCDIFMNLTK KQRQTLRKMV IDMLATDMS KHM SLLADLK TMVETKKVTS</p> <p>SGVLLLDNYT DRIQVLRNMV HCADLSNPTK SLELYRQWTD RIMEEFFQQG DKERERGMEI</p> <p>SPMCDKHTAS VEKSQVG FID YIVHPLWETW ADLVQPD AQD ILDTLEDNRN WYQSMIPQSP</p>

SPPLDEQNRD CQGLMEKFQF ETLDEEDSE GPEKEGEGHS YFSSTKTLCV IDPENRDSL
G ETDIDIATED KSPVDT

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 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:

- 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®).

Product Details

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

Grade: custom-made

Target Details

Target: PDE4B

Alternative Name: PDE4B ([PDE4B Products](#))

Background: 3',5'-cyclic-AMP phosphodiesterase 4B (EC 3.1.4.53) (DPDE4) (PDE32) (cAMP-specific phosphodiesterase 4B),FUNCTION: Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes (PubMed:15260978). May be involved in mediating central nervous system effects of therapeutic agents ranging from antidepressants to antiasthmatic and anti-inflammatory agents. {ECO:0000269|PubMed:10846163, ECO:0000269|PubMed:15003452, ECO:0000269|PubMed:15260978}.

Molecular Weight: 83.3 kDa

UniProt: [Q07343](#)

Pathways: [Cellular Response to Molecule of Bacterial Origin](#), [cAMP Metabolic Process](#), [Myometrial Relaxation and Contraction](#)

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.

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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 Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months