

Datasheet for ABIN3136427

PASK Protein (AA 1-1383) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	PASK
Protein Characteristics:	AA 1-1383
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PASK protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AlIcE®
Sequence:	<p>MEDRGPPVFA EDWKCLSESP PVQEGPAAQA TFEPSKPLSI AHKHLSRKNG LSRLCQSRMA</p> <p>LSEDRWSSYC LSSLAAQNIC TSKLHCAAAP EYADPTAGPL GSTSCCSLLR GLASGCSGSL</p> <p>LSTPVCNPNK AVFTVDAKTT EILVANDKAC SLLGYSSHDL IGQKLAQFFL KSDSEVVEAL</p> <p>SEEHVEADGH AAVVFGTVVD IVSRIGEKIP VSVWIKRLQQ DRGLCCVVVL EPVERVSAWV</p> <p>AFQSDGTITS CDSLFAHLHG FTSPKDVVGQ CVIDLIPSMQ LPPPGQHIPP SLKIQRSVGR</p> <p>ARDGTTFPLS LKLKSKPSGR AVADSEAASE PGYQASVWVF CTISGLITLL PDGTIYGVNH</p> <p>SFALMLFGYG KTELLGKNIT FLIPGFYHYM DLTYDSSVQL PDLVNCLDIG RKSGPGEMNS</p> <p>DAQHNWELAS GAQGPRIDVV LARDHMPSQD ETLKLVGGQV SSRTQTRLET GYKILPSSAC</p> <p>QPSLGVDSNP EDGEQSLTLD QQSIPKRNLP AHGGQNQLDT SEISLPVLKE HLLSEIQKNI</p> <p>SEESPLTHRK WLSKVQQNPT KGSLPIHEEQ LLFAGQHIHV LGKEDPSAAE SYRESLLEES</p> <p>KSKPVDAKLF ASCEDSEPLV SVKDRGSSVD TCNLHQEAQL ELMGVSSPNP WADATMPEPH</p>

TTGQIAGGSL TYCPQYRSEW ASQQRGQDSA PSPSGMACVL LGTPTLDEPW PGVRNDREEL
QTCLIKEQLS KSSCEGNLGI SRVELVPEEH PPFTAPVSFC DLGGRDLHAS RSGSSSACYA
LATDLPGVLE AVEAQEADV N SYSWNLKELF LKQDQDRTPS HCSC TTSELS EAPSLSVVGS
DLDVGILHRQ TSDILVDREM LLLTGTYFDL SEGQRFQEMG AGHDRAELSN ISLVSSHEYE
TSDIESPGCD PPLPDPGPND MCLSAEKPRP SAQITSTPVA RGATSLQQEI QEGIYSGSCY
HRDGLQLSIQ FEVKRVELQG SATLFCCWL V KDLFHSRDS ATRTRLFLAS LPSSTHSMPE
LSGSSFGEV L RAKPWFEESP TP AELEGLAA CEGEYDYKYN TISPLGSGAF GFVWTAVEKE
CNKEVVVKFI KKEKVLEDCW IEDPKLGRVT LEIAILSKVD HANIIKVLDI FENQEFFQLV
MEKHGSGMDL FAFIDHHPCL DEPLASFIFR QLVS AVGYLH SQGIIHRDIK DENIVIAEDF
TIKLIDFGSA AYLERGKLFY TFCGTIEYCA PEVLIGNPYR GPELEMWSLG VTLYTLIFEE
NPFCEVEETM EAVIHPPFLV SQELMSLLSG LLQPCPEQRT TLEKLIRDPW VTQPVNLASY
TWEEVCRTNQ PESGLLSAAS LEIGSRSPSE MAQREGLCGP PAPRETRGDQ HCLHLKDPSL PVS

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

Product Details

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

Target Details

Target:	PASK
Alternative Name:	Pask (PASK Products)
Background:	PAS domain-containing serine/threonine-protein kinase (PAS-kinase) (PASKIN) (EC 2.7.11.1),FUNCTION: Serine/threonine-protein kinase involved in energy homeostasis and protein translation. Phosphorylates EEF1A1, GYS1, PDX1 and RPS6. Probably plays a role under changing environmental conditions (oxygen, glucose, nutrition), rather than under standard conditions. Acts as a sensor involved in energy homeostasis: regulates glycogen synthase synthesis by mediating phosphorylation of GYS1, leading to GYS1 inactivation. May be involved in glucose-stimulated insulin production in pancreas and regulation of glucagon secretion by glucose in alpha cells, however such data require additional evidences. May play a role in regulation of protein translation by phosphorylating EEF1A1, leading to increase translation efficiency. May also participate in respiratory regulation. {ECO:0000269 PubMed:15148392, ECO:0000269 PubMed:17878307, ECO:0000269 PubMed:18509100, ECO:0000269 PubMed:21181396}.
Molecular Weight:	151.3 kDa
UniProt:	Q8CEE6
Pathways:	Regulation of Carbohydrate 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!

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