Datasheet for ABIN3093697

MARK1 Protein (AA 1-795) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	MARK1
Protein Characteristics:	AA 1-795
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MARK1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MSARTPLPTV NERDTENHTS VDGYTEPHIQ PTKSSSRQNI PRCRNSITSA TDEQPHIGNY RLQKTIGKGN FAKVKLARHV LTGREVAVKI IDKTQLNPTS LQKLFREVRI MKILNHPNIV KLFEVIETEK TLYLVMEYAS GGEVFDYLVA HGRMKEKEAR AKFRQIVSAV QYCHQKYIVH RDLKAENLLL DGDMNIKIAD FGFSNEFTVG NKLDTFCGSP PYAAPELFQG KKYDGPEVDV WSLGVILYTL VSGSLPFDGQ NLKELRERVL RGKYRIPFYM STDCENLLKK LLVLNPIKRG SLEQIMKDRW MNVGHEEEEL KPYTEPDPDF NDTKRIDIMV TMGFARDEIN DALINQKYDE VMATYILLGR KPPEFEGGES LSSGNLCQRS RPSSDLNNST LQSPAHLKVQ RSISANQKQR RFSDHAGPSI PPAVSYTKRP QANSVESEQK EEWDKDVARK LGSTTVGSKS EMTASPLVGP ERKKSSTIPS NNVYSGGSMA RRNTYVCERT TDRYVALQNG KDSSLTEMSV SSISSAGSSV ASAVPSARPR HQKSMSTSGH PIKVTLPTIK DGSEAYRPGT TQRVPAASPS AHSISTATPD RTRFPRGSSS RSTFHGEQLR ERRSVAYNGP PASPSHETGA FAHARRGTST GIISKITSKF

VRRDPSEGEA SGRTDTSRST SGEPKERDKE EGKDSKPRSL RFTWSMKTTS SMDPNDMMRE IRKVLDANNC DYEQKERFLL FCVHGDARQD SLVQWEMEVC KLPRLSLNGV RFKRISGTSI AFKNIASKIA NELKL

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

Product Details

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

Target Details

Target:	MARK1
Alternative Name:	MARK1 (MARK1 Products)
Background:	Serine/threonine-protein kinase MARK1 (EC 2.7.11.1) (EC 2.7.11.26) (MAP/microtubule affinity-regulating kinase 1) (PAR1 homolog c) (Par-1c) (Par1c),FUNCTION: Serine/threonine-protein kinase (PubMed:23666762). Involved in cell polarity and microtubule dynamics regulation. Phosphorylates DCX, MAP2 and MAP4. Phosphorylates the microtubule-associated protein MAPT/TAU (PubMed:23666762). Involved in cell polarity by phosphorylating the microtubule-associated proteins MAP2, MAP4 and MAPT/TAU at KXGS motifs, causing detachment from microtubules, and their disassembly. Involved in the regulation of neuronal migration through its dual activities in regulating cellular polarity and microtubule dynamics, possibly by phosphorylating and regulating DCX. Also acts as a positive regulator of the Wnt signaling pathway, probably by mediating phosphorylation of dishevelled proteins (DVL1, DVL2 and/or DVL3). {ECO:0000269|PubMed:11433294, ECO:0000269|PubMed:17573348, ECO:0000269|PubMed:23666762}.
Molecular Weight:	89.0 kDa
UniProt:	Q9P0L2
Pathways:	SARS-CoV-2 Protein Interactome, The Global Phosphorylation Landscape of SARS-CoV-2 Infection

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.

Application Details

	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