

Datasheet for ABIN3113975

NCKAP1L Protein (AA 1-1127) (Strep Tag)



Overview

Quantity:	250 μg
Target:	NCKAP1L
Protein Characteristics:	AA 1-1127
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NCKAP1L protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Brand:	AliCE®
Sequence:	MSLTSAYQHK LAEKLTILND RGQGVLIRMY NIKKTCSDPK SKPPFLLEKS MEPSLKYINK
	KFPNIDVRNS TQHLGPVHRE KAEIIRFLTN YYQSFVDVME FRDHVYELLN TIDACQCHFD
	INLNFDFTRS YLDLIVTYTS VILLLSRIED RRILIGMYNC AHEMLHGHGD PSFARLGQMV
	LEYDHPLKKL TEEFGPHTKA VSGALLSLHF LFVRRNQGAE QWRSAQLLSL ISNPPAMINP
	ANSDTMACEY LSVEVMERWI IIGFLLCHGC LNSNSQCQKL WKLCLQGSLY ITLIREDVLQ
	VHKVTEDLFS SLKGYGKRVA DIKESKEHVI ANSGQFHCQR RQFLRMAVKE LETVLADEPG
	LLGPKALFAF MALSFIRDEV TWLVRHTENV TKTKTPEDYA DSSIAELLFL LEGIRSLVRR
	HIKVIQQYHL QYLARFDALV LSDIIQNLSV CPEEESIIMS SFVSILSSLN LKQVDNGEKF
	EFSGLRLDWF RLQAYTSVAK APLHLHENPD LAKVMNLIVF HSRMLDSVEK LLVETSDLST
	FCFHLRIFEK MFAMTLEESA MLRYAIAFPL ICAHFVHCTH EMCPEEYPHL KNHGLHHCNS
	FLEELAKQTS NCVLEICAEQ RNLSEQLLPK HCATTISKAK NKKTRKQRQT PRKGEPERDK

PGAESHRKNR SIVTNMDKLH LNLTELALTM NHVYSFSVFE HTIFPSEYLS SHLEARLNRA
IVWLAGYNAT TQEIVRPSEL LAGVKAYIGF IQSLAQFLGA DASRVIRNAL LQQTQPLDSC
GEQTITTLYT NWYLESLLRQ ASSGTIILSP AMQAFVSLPR EGEQNFSAEE FSDISEMRAL
AELLGPYGMK FLSENLMWHV TSQIVELKKL VVENMDILVQ IRSNFSKPDL MASLLPQLTG
AENVLKRMTI IGVILSFRAM AQEGLREVFS SHCPFLMGPI ECLKEFVTPD TDIKVTLSIF
ELASAAGVGC DIDPALVAAI ANLKADTSSP EEEYKVACLL LIFLAVSLPL LATDPSSFYS
IEKDGYNNNI HCLTKAIIQV SAALFTLYNK NIETHLKEFL VVASVSLLQL GQETDKLKTR
NRESISLLMR LVVEESSFLT LDMLESCFPY VLLRNAYREV SRAFHLN

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

Grade: custom-made

Target Details

NCKAP1L Target: Alternative Name: NCKAP1L (NCKAP1L Products) Background: Nck-associated protein 1-like (Hematopoietic protein 1) (Membrane-associated protein HEM-1), FUNCTION: Essential hematopoietic-specific regulator of the actin cytoskeleton (Probable). Controls lymphocyte development, activation, proliferation and homeostasis, erythrocyte membrane stability, as well as phagocytosis and migration by neutrophils and macrophages (PubMed:16417406, PubMed:17696648). Component of the WAVE2 complex which signals downstream of RAC to stimulate F-actin polymerization. Required for stabilization and/or translation of the WAVE2 complex proteins in hematopoietic cells (By similarity). Within the WAVE2 complex, enables the cortical actin network to restrain excessive degranulation and granule release by T-cells (PubMed:32647003). Required for efficient T-lymphocyte and neutrophil migration (PubMed:32647003). Exhibits complex cycles of activation and inhibition to generate waves of propagating the assembly with actin (PubMed:16417406). Also involved in mechanisms WAVE-independent to regulate myosin and actin polymerization during neutrophil chemotaxis (PubMed:17696648). In T-cells, required for proper mechanistic target of rapamycin complex 2 (mTORC2)-dependent AKT phosphorylation, cell proliferation and cytokine secretion, including that of IL2 and TNF (PubMed:32647003). {ECO:0000250|UniProtKB:Q8K1X4, ECO:0000269|PubMed:16417406, ECO:0000269|PubMed:17696648, ECO:0000269|PubMed:32647003, ECO:0000303|PubMed:20969869}. Molecular Weight: 128.2 kDa UniProt: P55160

Pathways: Regulation of Actin Filament Polymerization

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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	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