Datasheet for ABIN3137389

NPHP1 Protein (AA 1-687) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	NPHP1
Protein Characteristics:	AA 1-687
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NPHP1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MLARRPRDPL QALRRRGQEL KLQVDSLVTE SQLTGALEPS KRREIYQRCI QLKQAVDENK NTLQKLNKAD EAAPVGNYEQ RKEEEHSLLE KLACQLQELA VSISRKDALK VEAHSDKEED DTTEDDEEET GGEEEESEGD GEGKQEQASP KQAETETVTY IALGDFAAQQ TGDLTFKKGD VLHIIEKKPD GWWLAKDAEG VEGLIPRTYL EPYNKEDKLE SSEGSEEGGE EDGEEDVEVV DETADGAQVK QRTDSHWSAV RKAISEQINT VDVLATMGAI PAGFRPSTLS QLLDEAGNQF RASYFLQPEL TTSQLAFRDL TWDAKAGTIM SRPSRVSLIL TLWSCKMIPL PGTSIQVLSR HIRLCLFDGS KVLSNIHTVR AVWQPKKPKT WTFSPQVTGI LPCLLDGDCF IRSNSSTPDL GILFELGISY IRNSTGERGE LSCGWVFLKL FDASGVPIPA KTYELFLNGG TPYEKGVEVD PSVSRRAQGS VFRQMISVRR QPQLLVKLRS LNRRSRAMLS LLPETLVGSM CSAHLLIFYR QILGDVLLRD RTNLQSADLI SHPVLATFPL LLEQPDVMDA LRSSWSEKES TLKRAEKRDK ELLKAEFLLV YHDCVLPLLH STLLPPFRWA EEETEAARWK AIADFLKQSR ENEGSLKALL

	SPDGVHKPFD LSEQTFDFLG EIRKNSG **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:	NPHP1
Alternative Name:	Nphp1 (NPHP1 Products)
Background:	Nephrocystin-1,FUNCTION: Together with BCAR1 it may play a role in the control of epithelial cell polarity. Involved in the organization of apical junctions in kidney cells, together with NPHP4 and RPGRIP1L/NPHP8 (PubMed:21565611). Does not seem to be strictly required for ciliogenesis (PubMed:19208653). Seems to help to recruit PTK2B/PYK2 to cell matrix adhesions, thereby initiating phosphorylation of PTK2B/PYK2 and PTK2B/PYK2-dependent signaling (PubMed:11493697). May play a role in the regulation of intraflagellar transport (IFT) during cilia assembly (PubMed:19208653). Required for normal retina development (PubMed:19208653). In connecting photoreceptor cilia influences the movement of some IFT proteins such as IFT88 and WDR19 (PubMed:19208653). Involved in spermatogenesis, required for the differentiation of early elongating spermatids into spermatozoa (PubMed:18684731). {ECO:0000269|PubMed:11493697, ECO:0000269|PubMed:18684731, ECO:0000269|PubMed:19208653, ECO:0000269|PubMed:21565611}.
Molecular Weight:	77.0 kDa
UniProt:	Q9QY53

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

Application Details

	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