Datasheet for ABIN3090554

CAMSAP2 Protein (AA 1-1489) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	CAMSAP2 (CAMSAP1L1)
Protein Characteristics:	AA 1-1489
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CAMSAP2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MGDAADPREM RKTFIVPAIK PFDHYDFSRA KIACNLAWLV AKAFGTENVP EELQEPFYTD QYDQEHIKPP VVNLLLSAEL YCRAGSLILK SDAAKPLLGH DAVIQALAQK GLYVTDQEKL VTERDLHKKP IQMSAHLAMI DTLMMAYTVE MVSIEKVIAC AQQYSAFFQA TDLPYDIEDA VMYWINKVNE HLKDIMEQEQ KLKEHHTVEA PGGQKSPSKW FWKLVPARYR KEQTLLKQLP CIPLVENLLK DGTDGCALAA LIHFYCPDVV RLEDICLKET MSLADSLYNL QLIQEFCQEY LNQCCHFTLE DMLYAASSIK SNYLVFMAEL FWWFEVVKPS FVQPRVVRPQ GAEPVKDMPS IPVLNAAKRN VLDSSSDFPS SGEGATFTQS HHHLPSRYSR PQAHSSASGG IRRSSSMSYV DGFIGTWPKE KRSSVHGVSF DISFDKEDSV QRSTPNRGIT RSISNEGLTL NNSHVSKHIR KNLSFKPING EEEAESIEEE LNIDSHSDLK SCVPLNTNEL NSNENIHYKL PNGALQNRIL LDEFGNQIET PSIEEALQII HDTEKSPHTP QPDQIANGFF LHSQEMSILN SNIKLNQSSP DNVTDTKGAL SPITDNTEVD TGIHVPSEDI PETMDEDSSL RDYTVSLDSD MDDASKFLQD

YDIRTGNTRE ALSPCPSTVS TKSQPGSSAS SSSGVKMTSF AEQKFRKLNH TDGKSSGSSS QKTTPEGSEL NIPHVVAWAQ IPEETGLPQG RDTTQLLASE MVHLRMKLEE KRRAIEAQKK KMEAAFTKQR QKMGRTAFLT VVKKKGDGIS PLREEAAGAE DEKVYTDRAK EKESQKTDGQ RSKSLADIKE SMENPQAKWL KSPTTPIDPE KQWNLASPSE ETLNEGEILE YTKSIEKLNS SLHFLQQEMQ RLSLQQEMLM QMREQQSWVI SPPQPSPQKQ IRDFKPSKQA GLSSAIAPFS SDSPRPTHPS PQSSNRKSAS FSVKSQRTPR PNELKITPLN RTLTPPRSVD SLPRLRRFSP SQVPIQTRSF VCFGDDGEPQ LKESKPKEEV KKEELESKGT LEQRGHNPEE KEIKPFESTV SEVLSLPVTE TVCLTPNEDQ LNQPTEPPPK PVFPPTAPKN VNLIEVSLSD LKPPEKADVP VEKYDGESDK EQFDDDQKVC CGFFFKDDQK AENDMAMKRA ALLEKRLRRE KETQLRKQQL EAEMEHKKEE TRRKTEEERQ KKEDERARRE FIRQEYMRRK QLKLMEDMDT VIKPRPQVVK QKKQRPKSIH RDHIESPKTP IKGPPVSSLS LASLNTGDNE SVHSGKRTPR SESVEGFLSP SRCGSRNGEK DWENASTTSS VASGTEYTGP KLYKEPSAKS NKHIIQNALA HCCLAGKVNE GQKKKILEEM EKSDANNFLI LFRDSGCQFR SLYTYCPETE EINKLTGIGP KSITKKMIEG LYKYNSDRKQ FSHIPAKTLS ASVDAITIHS HLWQTKRPVT PKKLLPTKA

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

Product Details

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

Target Details

Target:	CAMSAP2 (CAMSAP1L1)
Alternative Name:	CAMSAP2 (CAMSAP1L1 Products)
Background:	Calmodulin-regulated spectrin-associated protein 2 (Calmodulin-regulated spectrin-associated protein 1-like protein 1),FUNCTION: Key microtubule-organizing protein that specifically binds the minus-end of non-centrosomal microtubules and regulates their dynamics and organization (PubMed:23169647, PubMed:24486153, PubMed:24706919). Specifically recognizes growing microtubule minus-ends and autonomously decorates and stabilizes microtubule lattice formed by microtubule minus-end polymerization (PubMed:24486153, PubMed:24706919). Acts on free microtubule minus-ends that are not capped by microtubule-nucleating proteins or other factors and protects microtubule minus-ends from depolymerization (PubMed:24486153, PubMed:24706919). In addition, it also reduces the velocity of microtubule polymerization (PubMed:24486153, PubMed:24706919). Through the microtubule cytoskeleton, also regulates the organization of cellular organelles including the Golgi and the early endosomes (PubMed:27666745). Essential for the tethering, but not for nucleation of non-centrosomal microtubules at the Golgi: together with Golgi-associated proteins AKAP9 and PDE4DIP, required to tether non-centrosomal minus-end microtubules to the Golgi, an important step for polarized cell movement (PubMed:27666745). Also acts as a regulator of neuronal polarity and

Target Details

	development: localizes to non-centrosomal microtubule minus-ends in neurons and stabilizes non-centrosomal microtubules, which is required for neuronal polarity, axon specification and dendritic branch formation (PubMed:24908486). Through the microtubule cytoskeleton, regulates the autophagosome transport (PubMed:28726242). {ECO:0000269|PubMed:23169647, ECO:0000269|PubMed:24486153, ECO:0000269|PubMed:24706919, ECO:0000269|PubMed:24908486, ECO:0000269|PubMed:27666745, ECO:0000269|PubMed:28726242}.
Molecular Weight:	168.1 kDa
UniProt:	Q08AD1

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

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months