

Datasheet for ABIN3095812

TBCD Protein (AA 1-1192) (Strep Tag)



Go to Product page

Overview

Quantity:	250 μg
Target:	TBCD
Protein Characteristics:	AA 1-1192
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TBCD protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MALSDEPAAG GPEEEAEDET LAFGAALEAF GESAETRALL GRLREVHGGG AEREVALERF
	RVIMDKYQEQ PHLLDPHLEW MMNLLLDIVQ DQTSPASLVH LAFKFLYIIT KVRGYKTFLR
	LFPHEVADVE PVLDLVTIQN PKDHEAWETR YMLLLWLSVT CLIPFDFSRL DGNLLTQPGQ
	ARMSIMDRIL QIAESYLIVS DKARDAAAVL VSRFITRPDV KQSKMAEFLD WSLCNLARSS
	FQTMQGVITM DGTLQALAQI FKHGKREDCL PYAATVLRCL DGCRLPESNQ TLLRKLGVKL
	VQRLGLTFLK PKVAAWRYQR GCRSLAANLQ LLTQGQSEQK PLILTEDDDE DDDVPEGVER
	VIEQLLVGLK DKDTVVRWSA AKGIGRMAGR LPRALADDVV GSVLDCFSFQ ETDKAWHGGC
	LALAELGRRG LLLPSRLVDV VAVILKALTY DEKRGACSVG TNVRDAACYV CWAFARAYEP
	QELKPFVTAI SSALVIAAVF DRDINCRRAA SAAFQENVGR QGTFPHGIDI LTTADYFAVG
	NRSNCFLVIS VFIAGFPEYT QPMIDHLVTM KISHWDGVIR ELAARALHNL AQQAPEFSAT
	QVFPRLLSMT LSPDLHMRHG SILACAEVAY ALYKLAAQEN RPVTDHLDEQ AVQGLKQIHQ

QLYDRQLYRG LGGQLMRQAV CVLIEKLSLS KMPFRGDTVI DGWQWLINDT LRHLHLISSH SRQQMKDAAV SALAALCSEY YMKEPGEADP AIQEELITQY LAELRNPEEM TRCGFSLALG ALPGFLLKGR LQQVLTGLRA VTHTSPEDVS FAESRRDGLK AIARICQTVG VKAGAPDEAV CGENVSQIYC ALLGCMDDYT TDSRGDVGTW VRKAAMTSLM DLTLLLARSQ PELIEAHTCE RIMCCVAQQA SEKIDRFRAH AASVFLTLLH FDSPPIPHVP HRGELEKLFP RSDVASVNWS APSQAFPRIT QLLGLPTYRY HVLLGLVVSL GGLTESTIRH STQSLFEYMK GIQSDPQALG SFSGTLLQIF EDNLLNERVS VPLLKTLDHV LTHGCFDIFT TEEDHPFAVK LLALCKKEIK NSKDIQKLLS GIAVFCEMVQ FPGDVRRQAL LQLCLLLCHR FPLIRKTTAS QVYETLLTYS DVVGADVLDE VVTVLSDTAW DAELAVVREQ RNRLCDLLGV PRPQLVPQPG AC

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®).

Purity:

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

Grade:

custom-made

Target Details

Target:

TBCD

Alternative Name:

TBCD (TBCD Products)

Background:

Tubulin-specific chaperone D (Beta-tubulin cofactor D) (tfcD) (SSD-1) (Tubulin-folding cofactor D), FUNCTION: Tubulin-folding protein implicated in the first step of the tubulin folding pathway and required for tubulin complex assembly. Involved in the regulation of microtubule polymerization or depolymerization, it modulates microtubule dynamics by capturing GTPbound beta-tubulin (TUBB). Its ability to interact with beta tubulin is regulated via its interaction with ARL2. Acts as a GTPase-activating protein (GAP) for ARL2. Induces microtubule disruption in absence of ARL2. Increases degradation of beta tubulin, when overexpressed in polarized cells. Promotes epithelial cell detachment, a process antagonized by ARL2. Induces tight adherens and tight junctions disassembly at the lateral cell membrane (PubMed:10722852, PubMed:10831612, PubMed:11847227, PubMed:20740604, PubMed:27666370, PubMed:28158450). Required for correct assembly and maintenance of the mitotic spindle, and proper progression of mitosis (PubMed:27666370). Involved in neuron morphogenesis (PubMed:27666374). {ECO:0000269|PubMed:10722852, ECO:0000269|PubMed:10831612, ECO:0000269|PubMed:11847227, ECO:0000269|PubMed:20740604, ECO:0000269|PubMed:27666370, ECO:0000269|PubMed:27666374, ECO:0000269|PubMed:28158450}.

Molecular Weight:

132.6 kDa

UniProt:

Q9BTW9

Pathways:

Cell-Cell Junction Organization

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