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Datasheet for ABIN3136308
TBCD Protein (AA 1-1196) (Strep Tag)

Overview

Quantity:	1 mg
Target:	TBCD
Protein Characteristics:	AA 1-1196
Origin:	Mouse
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TBCD protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MVLSNEPAAS AEEEEVEDDA LVRASALEAF GESAETRALL RSLPAVHRER ASREVAEERF
RVIMDKYQEQ PHLLDPHLEW MMNSLLDLVQ DETSLPDLVH LAFKFLYIIT KVRGYKVFLR
LFPHEVANVQ PVLDMFTGQN PKDHETWETR YMLLLWLSVT CLIPFDFSRL DGNLSTQTGE
TRVPTMDRIL QIAESYLVVS DKARDAAVL VSKFITRPDV KQRKMASFLD WSLCTLAHSS
FQTIEGVITM DGMLQALAQI FKHGKREDCL PYANTVLQCL DGCRLPESSH TSLRKLGVKL
VQRLGLTFLK PKVATWRYQR GCRSLAANLK LCAPGKSDQK LLSDSLTSQG DEDYDVPPEGV
ETVIEQLLVG LKDKDTVVRW SAAKGIGRMA GRLPRELADD VVGSVLDCFS FQETDKAWHG
GCLALAE LGR RGLLLPSRLS EVVTILKAL TYDEKRGACS VGANVRDAAC YVCWAFARAY
EPQELTPFVT AISSALVIAA VFDRNVNCR AASAAFQENV GRQGTFFPHGI DILTTADYFA
VGNISNCFI ISVFIAGFQE YTKPMIDHLV SMKINHWDGA IRELSAKALH NLTPQVPEYI
AMHVFPALLL MTQSPDLHTR HGAILACA EV TYALYKLATQ SNRLVTDYLD EKAVQSLKQI
HQQLCDRHLY RGLGGELMRQ AVCILIEKLS LSRMPFKGDA TVEGWQWLIN DTLRSLHLVS

SHSRQIQKEV AVSALTALCS EYYVKEPGEA GSSIAKELIP QYLAELQSPE EMARCGFSSA
LGALPGFLLR GHLQQVLSGL RRVTCISPND VSFAEARRDG LKAISRICQT VGVNTRGPPD
EVICKENISE VYAALLGCMS DYTTSRGRDV GAWVREAAMT SLMDLMLLLA RTEPVLIEAH
ICERVMCCVA QQASEKIDRF RAHAARVFLT LLHFDSPPIP HVPHRQELES LFPRSDVATV
NWNAPSQAFP LITQLLGLPT YRYHVLLGLA VSVGGLTEST VRHSTQSLFE YMKGIQKDAQ
VLQSFSETLL KVFEDNLLND RVSVSLLKML DQLLANGCFD IFTAENHPF CVKLLTLCKE
EIKKSKDIQK LRSSIAVLCG MVQFNGDVRK KILLQLFLLL GHPFPVIRKS TASQVYEMVL
TYSDLVDAEV LDEVMSVLSD TAWDAELPVV REQRNRLCDL LGVPRPQLVP KPIPGS

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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!

Product Details

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

≥ 80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Endotoxin Level:

Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:

TBCD

Alternative Name:

Tbcd ([TBCD Products](#))

Background:

Tubulin-specific chaperone D (Beta-tubulin cofactor D) (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 GTP-bound 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. Required for correct assembly and maintenance of the mitotic spindle, and proper progression of mitosis. Involved in neuron morphogenesis. {ECO:0000250|UniProtKB:Q28205, ECO:0000250|UniProtKB:Q9BTW9}.

Molecular Weight:

133.3 kDa

UniProt:

[Q8BYA0](#)

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. If you have a special request, please contact us.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)
