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Datasheet for ABIN3136756
SATB2 Protein (AA 1-733) (Strep Tag)

Overview

Quantity:	1 mg
Target:	SATB2
Protein Characteristics:	AA 1-733
Origin:	Mouse
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SATB2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence: MERRSESPCL RDSPDRRSGS PDVKGPPPVK VARLEQNGSP MGARGRPNGA VAKAVGGLMI
PVFCVVEQLD GSLEYDNREE HAEFVLVRKD VLFSQLVETA LLALGYSHSS AAQAQGIKL
GRWNPLPLSY VTDAPDATVA DMLQDVYHVV TLKIQLQSCS KLEDLPAEQW NHATVRNALK
ELLKEMNQST LAKECPLSQS MISSIVNSTY YANVSATKCQ EFGRWYKYYK KIKVERVERE
NLSDYCVLGQ RPMHLPNMNQ LASLGKTNEQ SPSQIHHST PIRNQVPALQ PIMSPGLLSP
QLSPQLVRQQ IAMAHLINQQ IAVSRLLAHQ HPQAINQQFL NHPPIPRAVK PEPTNSSVEV
SPDIYQQVRD ELKRASVSQA VFARVAFNRT QGLLSEILRK EEDPRTASQS LLVNLRAMQN
FLNLPEVERD RIYQDERERS MNPNVSMVSS ASSSPSSSRT PQAKTSTPTT DLPIKVDGAN
VNITAAIYDE IQQEMKRAKV SQALFAKVA NKSQGWLCEL LRWKENPSPE NRTLWENLCT
IRRFNLNPQH ERDVIYEEES RHHHSERMQH VVQLPPEPVQ VLHRQQSQPT KESSPPREEA
PPPPPTEDS CAKKPRSRTK ISLEALGILQ SFIHDVGLYP DQEAHTLSA QLDLPKHTII
KFFQNQRYHV KHHGKLKEHL GSAVDVAEYK DEELLTESEE NDSEEGSEEM YKVEAEEENA

DKSKAAPAET DQR

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!

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

Product Details

(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: $\geq 80\%$ 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: SATB2

Alternative Name: Satb2 ([SATB2 Products](#))

Background: DNA-binding protein SATB2 (Special AT-rich sequence-binding protein 2),FUNCTION: Binds to DNA, at nuclear matrix- or scaffold-associated regions. Thought to recognize the sugar-phosphate structure of double-stranded DNA. Transcription factor controlling nuclear gene expression, by binding to matrix attachment regions (MARs) of DNA and inducing a local chromatin-loop remodeling. Acts as a docking site for several chromatin remodeling enzymes and also by recruiting corepressors (HDACs) or coactivators (HATs) directly to promoters and enhancers. Required for the initiation of the upper-layer neurons (UL1) specific genetic program and for the inactivation of deep-layer neurons (DL) and UL2 specific genes, probably by modulating Bcl11b expression. Repressor of Ctip2 and regulatory determinant of corticocortical connections in the developing cerebral cortex. May play an important role in palate formation. Acts as a molecular node in a transcriptional network regulating skeletal development and osteoblast differentiation. {ECO:0000269|PubMed:16751105, ECO:0000269|PubMed:18255030, ECO:0000269|PubMed:18255031}.

Molecular Weight: 82.6 kDa

UniProt: [Q8VI24](#)

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

Application Details

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)