

Datasheet for ABIN3131255

STXBP1 Protein (AA 1-594) (Strep Tag)



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| Quantity: | 250 μg |
|-------------------------------|---|
| Target: | STXBP1 |
| Protein Characteristics: | AA 1-594 |
| Origin: | Mouse |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This STXBP1 protein is labelled with Strep Tag. |
| Application: | ELISA, Western Blotting (WB), SDS-PAGE (SDS) |

| Brand: | AliCE® |
|-----------|---|
| Sequence: | MAPIGLKAVV GEKIMHDVIK KVKKKGEWKV LVVDQLSMRM LSSCCKMTDI MTEGITIVED |
| | INKRREPLPS LEAVYLITPS EKSVHSLISD FKDPPTAKYR AAHVFFTDSC PDALFNELVK |
| | SRAAKVIKTL TEINIAFLPY ESQVYSLDSA DSFQSFYSPH KAQMKNPILE RLAEQIATLC |
| | ATLKEYPAVR YRGEYKDNAL LAQLIQDKLD AYKADDPTMG EGPDKARSQL LILDRGFDPS |
| | SPVLHELTFQ AMSYDLLPIE NDVYKYETSG IGEARVKEVL LDEDDDLWIA LRHKHIAEVS |
| | QEVTRSLKDF SSSKRMNTGE KTTMRDLSQM LKKMPQYQKE LSKYSTHLHL AEDCMKHYQG |
| | TVDKLCRVEQ DLAMGTDAEG EKIKDPMRAI VPILLDANVS TYDKIRIILL YIFLKNGITE |
| | ENLNKLIQHA QIPPEDSEII TNMAHLGVPI VTDSTLRRRS KPERKERISE QTYQLSRWTP |
| | IIKDIMEDTI EDKLDTKHYP YISTRSSASF STTAVSARYG HWHKNKAPGE YRSGPRLIIF |
| | ILGGVSLNEM RCAYEVTQAN GKWEVLIGST HILTPQKLLD TLKKLNKTDE EISS |
| | 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: | STXBP1 | |
|---------------------|---|--|
| Alternative Name: | Stxbp1 (STXBP1 Products) | |
| Background: | Syntaxin-binding protein 1 (Protein unc-18 homolog 1) (Unc18-1) (Protein unc-18 homolog A) | |
| | (Unc-18A), FUNCTION: Participates in the regulation of synaptic vesicle docking and fusion | |
| | through interaction with GTP-binding proteins (By similarity). Essential for neurotransmission | |
| | and binds syntaxin, a component of the synaptic vesicle fusion machinery probably in a 1:1 | |
| | ratio. Can interact with syntaxins 1, 2, and 3 but not syntaxin 4. Involved in the release of | |
| | neurotransmitters from neurons through interacting with SNARE complex component STX1A | |
| | and mediating the assembly of the SNARE complex at synaptic membranes | |
| | (PubMed:21445306, PubMed:28821673). May play a role in determining the specificity of | |
| | intracellular fusion reactions (By similarity). {ECO:0000250, ECO:0000250 UniProtKB:P61765, | |
| | ECO:0000269 PubMed:21445306, ECO:0000269 PubMed:28821673}. | |
| Molecular Weight: | 67.6 kDa | |
| UniProt: | 008599 | |
| Pathways: | Synaptic Vesicle Exocytosis, Dicarboxylic Acid Transport | |
| 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 |