

Datasheet for ABIN3080400  
**FOSB Protein (AA 1-338) (Strep Tag)**[Go to Product page](#)

## 1 Image

## Overview

|                               |   |
|-------------------------------|---|
| Quantity:                     | 1 mg  |
| Target:                       | FOSB  |
| Protein Characteristics:      | AA 1-338                                      |
| Origin:                       | Human   |
| Source:                       | Tobacco (Nicotiana tabacum)                   |
| Protein Type:                 | Recombinant                                   |
| Purification tag / Conjugate: | This FOSB protein is labelled with Strep Tag. |
| Application:                  | ELISA, Western Blotting (WB), SDS-PAGE (SDS)  |

## Product Details

|                  |  |
|------------------|--|
| Sequence:        | <p>MFQAFPGDYD SGSRCSSSPS AESQYLSSVD SFGSPPTAAA SQECAGLGEM PGSFVPTVTA<br/>ITTSQDLQWL VQPTLISSMA QSQGQPLASQ PPVVDPYDMP GTSYSTPGMS GYSSGGASGS<br/>GGPSTSGTTS GPGPARPARA RPRRPREETL TPEEEEKRRV RRERNKLAAS KCRNRRRELT<br/>DRLQAETDQL EEEKAELESE IAEQKEKER LEFVLVAHKP GCKIPYEEGP GPGPLAEVRD<br/>LPGSAPAKED GFSWLLPPPP PPPLPFQTSQ DAPPNLTASL FTHSEVQVLG DPFPVWNPSY<br/>TSSFVLTCPE VSAFAGAQRT SGSDQPSDPL NSPSLLAL</p> <p><b>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.</b></p> |
| Characteristics: | <p>Key Benefits:</p> <ul style="list-style-type: none"><li>• Made in Germany - from design to production - by highly experienced protein experts.</li><li>• Protein expressed with ALICE® and purified by multi-step, protein-specific process to ensure</li></ul>   |

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.

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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.

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Purity:

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

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## Product Details

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

Grade: Crystallography grade

## Target Details

Target: FOSB

Alternative Name: FOSB ([FOSB Products](#))

Background: Protein FosB (FosB proto-oncogene, AP-1 transcription factor subunit) (G0/G1 switch regulatory protein 3) (Transcription factor AP-1 subunit FosB),FUNCTION: Heterodimerizes with proteins of the JUN family to form an AP-1 transcription factor complex, thereby enhancing their DNA binding activity to gene promoters containing an AP-1 consensus sequence 5'-TGA[GC]TCA-3' and enhancing their transcriptional activity (PubMed:12618758, PubMed:28981703). As part of the AP-1 complex, facilitates enhancer selection together with cell-type-specific transcription factors by collaboratively binding to nucleosomal enhancers and recruiting the SWI/SNF (BAF) chromatin remodeling complex to establish accessible chromatin (By similarity). Together with JUN, plays a role in activation-induced cell death of T cells by binding to the AP-1 promoter site of FASLG/CD95L, and inducing its transcription in response to activation of the TCR/CD3 signaling pathway (PubMed:12618758). Exhibits transactivation activity in vitro (By similarity). Involved in the display of nurturing behavior towards newborns (By similarity). May play a role in neurogenesis in the hippocampus and in learning and memory-related tasks by regulating the expression of various genes involved in neurogenesis, depression and epilepsy (By similarity). Implicated in behavioral responses related to morphine reward and spatial memory (By similarity). {ECO:0000250|UniProtKB:P13346, ECO:0000269|PubMed:12618758, ECO:0000269|PubMed:28981703}., FUNCTION: [Isoform 11]: Exhibits lower transactivation activity than isoform 1 in vitro (By similarity). The heterodimer with JUN does not display any transcriptional activity, and may thereby act as a transcriptional inhibitor (By similarity). May be involved in the regulation of neurogenesis in the hippocampus (By similarity). May play a role in synaptic modifications in nucleus accumbens medium spiny neurons and thereby play a role in adaptive and pathological reward-dependent learning, including maladaptive responses involved in drug addiction (By similarity). Seems to be more stably expressed with a half-life of ~9.5 hours in cell culture as compared to 1.5 hours half-life of isoform 1 (By similarity). {ECO:0000250|UniProtKB:P13346}.

Molecular Weight: 35.9 kDa

UniProt: [P53539](#)

## Application Details

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|--------------------|--|
| 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: | <p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p> |
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|               |                       |
|---------------|-----------------------|
| 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)   |



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process