

Datasheet for ABIN3127877

## SPEF1 Protein (AA 1-234) (Strep Tag)



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### Overview

Quantity:	1 mg
Target:	SPEF1
Protein Characteristics:	AA 1-234
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SPEF1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Brand:	ALiCE®
Sequence:	<p>MESSVDEEAL HQLYLWVDNI PLSRPKRNLSD FSDGVLVA ELIKFYFPKM VEMHNYVPAN  SLQQKLSNWG HLN RKVLNKL NFSVPDDVMR KIAQCSPGVV ELVLIPLRQR LEERQRRQKL  GVGSLQELAP QDSSGYMDMG LPQKVRGEGA PALGEQLREG RPLASRPPGY NQALQGDP SF  VLQIAEKEQE LLASQETVQV LQMKVKRLEH LLQLKNVRID DLSRRLQQAE RKQR</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 in one-step affinity chromatography</li> <li>• These proteins are normally active (enzymatically functional) as our customers have</li> </ul>

Product Details

- 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 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 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:	SPEF1
Alternative Name:	Spef1 ( <a href="#">SPEF1 Products</a> )
Background:	Sperm flagellar protein 1 (Calponin-homology and microtubule-associated protein),FUNCTION:

## Target Details

Microtubule-associated protein that promotes microtubule bundling and stabilizes microtubules against depolymerization in response to cold shock (PubMed:16206169). Microtubule-associated protein involved in the stabilization of microtubules along the axis of migration during radial intercalation. Promotes the establishment and stabilization of an axis of microtubules required for the active migration of cells into the outer epithelium (By similarity). Essential for ciliary central apparatus formation which requires both its microtubule-binding and bundling activities and for ciliary localization of HYDIN and SPAG6 in ependymal cilia (PubMed:30535028). Binds actin in intestinal epithelial cells (IECs), essential for IECs survival and contributes to formation of filopodia and lamellipodia in migrating IECs (By similarity). Regulates planar cell polarity signaling pathway and asymmetric microtubule accumulation in ciliated epithelia (By similarity). {ECO:0000250|UniProtKB:Q0IH24, ECO:0000269|PubMed:16206169, ECO:0000269|PubMed:30535028}.

Molecular Weight: 26.8 kDa

UniProt: [Q99JL1](#)

## 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.

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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

## Handling

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Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months