

### Datasheet for ABIN3135187

# SPATA13 Protein (AA 1-656) (Strep Tag)



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Quantity:	250 μg
Target:	SPATA13
Protein Characteristics:	AA 1-656
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SPATA13 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details		
Brand:	AliCE®	
Sequence:	MHPASVTTTS QDPCAPSGSC RGGRRRRPIS VIGGVSFYGN TQVEDVENLL VQPAARPPVP	
	AHQVPPYKAV SARLRPFTFS QSTPIGLDRV GRRRQMKTSN VSSDGGAESS ALVDDNGSEE	
	DFSYEELCQA NPRYLQPGGE QLAINELISD GSVVCAEALW DHVTMDDQEL GFKAGDVIQV	
	LEASNKDWWW GRNEDKEAWF PASFVRLRVN QEELPENCSS SHGEEQDEDT SKARHKHPES	
	QQQMRTNVIQ EIMNTERVYI KHLKDICEGY IRQCRKHTGM FTVAQLATIF GNIEDIYKFQ	
	RKFLKDLEKQ YNKEEPHLSE IGSCFLEHQE GFAIYSEYCN NHPGACVELS NLMKHSKYRH	
	FFEACRLLQQ MIDIALDGFL LTPVQKICKY PLQLAELLKY TTQEHGDYNN IKAAYEAMKN	
	VACLINERKR KLESIDKIAR WQVSIVGWEG LDILDRSSEL IHSGELTKIT RQGKSQQRIF	
	FLFDHQLVSC KKDLLRRDML YYKGRMDMDE VELVDVEDGR DKDWSLSLRN AFKLVSKATD	
	EVHLFCARKQ EDKARWLQAY ADERRRVQED QQMGMEIPEN QKKLAMLNAQ KAGHGKSKGY	
	NSCPVAPPHQ SLPPLHQRHI TVPTSIPQQQ VFALAEPKRK PSIFWHTFHK LTPFRK	

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).

## **Product Details** Grade: custom-made **Target Details** Target: SPATA13 Alternative Name Spata13 (SPATA13 Products) Background: Spermatogenesis-associated protein 13 (APC-stimulated guanine nucleotide exchange factor 2) (Asef2), FUNCTION: Acts as a guanine nucleotide exchange factor (GEF) for RHOA, RAC1 and CDC42 GTPases. Regulates cell migration and adhesion assembly and disassembly through a RAC1, PI3K, RHOA and AKT1-dependent mechanism. Increases both RAC1 and CDC42 activity, but decreases the amount of active RHOA (By similarity). Required for MMP9 up-regulation via the JNK signaling pathway in colorectal tumor cells. Involved in tumor angiogenesis and may play a role in intestinal adenoma formation and tumor progression. (ECO:0000250, ECO:0000269|PubMed:19893577}. Molecular Weight: 75.3 kDa UniProt: Q5DU57 **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!

For Research Use only

Restrictions:

### Handling

Format:	Liquid
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