

# Datasheet for ABIN3095590 SMG8 Protein (AA 1-991) (Strep Tag)



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Quantity:	250 μg
Target:	SMG8
Protein Characteristics:	AA 1-991
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMG8 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Brand:	AliCE®
Sequence:	MAGPVSLRDL LMGASAWMGS ESPGGSPTEG GGSAAGGPEP PWREDEICVV GIFGKTALRL
	NSEKFSLVNT VCDRQVFPLF RHQDPGDPGP GIRTEAGAVG EAGGAEDPGA AAGGSVRGSG
	AVAEGNRTEA GSQDYSLLQA YYSQESKVLY LLLTSICDNS QLLRACRALQ SGEAGGGLSL
	PHAEAHEFWK HQEKLQCLSL LYLFSVCHIL LLVHPTCSFD ITYDRVFRAL DGLRQKVLPL
	LKTAIKDCPV GKDWKLNCRP CPPRLLFLFQ LNGALKVEPP RNQDPAHPDK PKKHSPKRRL
	QHALEDQIYR IFRKSRVLTN QSINCLFTVP ANQAFVYIVP GSQEEDPVGM LLDQLRSHCT
	VKDPESLLVP APLSGPRRYQ VMRQHSRQQL SFHIDSSSSS SSGQLVDFTL REFLWQHVEL
	VLSKKGFDDS VGRNPQPSHF ELPTYQKWIS AASKLYEVAI DGKEEDLGSP TGELTSKILS
	SIKVLEGFLD IDTKFSENRC QKALPMAHSA YQSNLPHNYT MTVHKNQLAQ ALRVYSQHAR
	GPAFHKYAMQ LHEDCYKFWS NGHQLCEERS LTDQHCVHKF HSLPKSGEKP EADRNPPVLY
	HNSRARSTGA CNCGRKQAPR DDPFDIKAAN YDFYQLLEEK CCGKLDHINF PVFEPSTPDP

APAKNESSPA PPDSDADKLK EKEPQTQGES TSLSLALSLG QSTDSLGTYP ADPQAGGDNP EVHGQVEVKT EKRPNFVDRQ ASTVEYLPGM LHSNCPKGLL PKFSSWSLVK LGPAKSYNFH TGLDQQGFIP GTNYLMPWDI VIRTRAEDEG DLDTNSWPAP NKAIPGKRSA VVMGRGRRRD DIARAFVGFE YEDSRGRRFM CSGPDKVMKV MGSGPKESAL KALNSDMPLY ILSSSQGRGL KPHYAQLMRL FVVVPDAPLQ IILMPQVQPG PPPCPVFYPE KQEITLPPDG LWVLRFPYAY VTERGPCFPP KENVQLMSYK VLRGVLKAVT Q

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.

Froduct Details		
	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:	SMG8	
Alternative Name:	SMG8 (SMG8 Products)	
Background:	Nonsense-mediated mRNA decay factor SMG8 (Amplified in breast cancer gene 2 protein) (Protein smg-8 homolog),FUNCTION: Involved in nonsense-mediated decay (NMD) of mRNAs containing premature stop codons. Is recruited by release factors to stalled ribosomes togethe with SMG1 and SMG9 (forming the SMG1C protein kinase complex) and, in the SMG1C complex, is required to mediate the recruitment of SMG1 to the ribosome:SURF complex and to suppress SMG1 kinase activity until the ribosome:SURF complex locates the exon junction complex (EJC). Acts as a regulator of kinase activity. {ECO:0000269 PubMed:19417104}.	
Molecular Weight:	109.7 kDa	
UniProt:	Q8ND04	
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	

## **Application Details**

	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 <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