

# Datasheet for ABIN3136789

# NSMCE2 Protein (AA 1-247) (Strep Tag)



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Quantity:	1 mg
Target:	NSMCE2
Protein Characteristics:	AA 1-247
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NSMCE2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)
Product Details	
Brand:	AliCE®
Sequence:	MPGRSSTSSG STRYISFSGI ESALSSLKNF QSCISSGMDT VSSVALDLVE TQTEVSSEYS
	MDKAMVEFAK MDRELSHYVK AVQSTINHVK EERPEKVPDL KLLVEKKFLA LQDKNSDADF
	KENEKFVQFK QQLRELKKQY GIHADRENDL TEGVDEDMIV TQSQTNFICP ITQLEMKKPV
	KNKMCGHTYE EEAIVRMIES KHKRKKKACC PKIGCSHTDM RMSDLIPDEA LRRAIESHNK
	KKKRHSE
	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: NSMCE2

Alternative Name: Nsmce2 (NSMCE2 Products)

#### Target Details

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E3 SUMO-protein ligase NSE2 (EC 2.3.2.-) (E3 SUMO-protein transferase NSE2) (MMS21 homolog) (Non-structural maintenance of chromosomes element 2 homolog) (Non-SMC element 2 homolog), FUNCTION: E3 SUMO-protein ligase component of the SMC5-SMC6 complex, a complex involved in DNA double-strand break repair by homologous recombination. Is not be required for the stability of the complex. The complex may promote sister chromatid homologous recombination by recruiting the SMC1-SMC3 cohesin complex to double-strand breaks. Acts as an E3 ligase mediating SUMO attachment to various proteins such as SMC6L1 and TSNAX, the shelterin complex subunits TERF1, TERF2, TINF2 and TERF2IP, RAD51AP1, and maybe the cohesin components RAD21 and STAG2. Required for recruitment of telomeres to PML nuclear bodies. Required for sister chromatid cohesion during prometaphase and mitotic progression. {EC0:0000250|UniProtKB:Q96MF7}.

Molecular Weight:

28.2 kDa

UniProt:

Q91VT1

### **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:

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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

Buffer: The buffer composition is at the discretion of the manufacturer.

## Handling

	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