

Datasheet for ABIN3084593  
**NSMCE4A Protein (AA 1-385) (Strep Tag)**



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## Overview

Quantity:	1 mg
Target:	NSMCE4A
Protein Characteristics:	AA 1-385
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NSMCE4A protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

## Product Details

Sequence: MSGDSSGRGP EGRGRGRDPH RDRTRSRSRS RSPLSPRSRR GSARERREAP ERPSLEDTEP  
SDSGDEMMDP ASLEAEADQG LCRQIRHQYR ALINSVQQNR EDILNAGDKL TEVLEEANTL  
FNEVSRAREA VLDAHFLVLA SDLGKEKAKQ LRSDLSSFDM LRYVETLLTH MGVNPLEAEE  
LIRDEDSPDF EFIVYDSWKI TGRTAENTFN KHTHFHLLG SIYGECVVPK PRVDRPRKVP  
VIQEERAMPA QLRRMEESHQ EATEKEVERI LGLLQTYFRE DPDTPMSFFD FVVDPHSFPR  
TVENIFHVSF IIRDFARIR LDQDRLPVIE PVSINEENEG FEHNTQVRNQ GIIALSYRDW EEIVKTFEIS  
EPVITPSQRQ QKPSA

**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.

## Product Details

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- 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 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.

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Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).
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Purity:	> 80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
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## Target Details

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Target:	NSMCE4A
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Alternative Name:	NSMCE4A ( <a href="#">NSMCE4A Products</a> )
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Background:	Non-structural maintenance of chromosomes element 4 homolog A (NS4EA) (Non-SMC
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## Target Details

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element 4 homolog A),FUNCTION: Component of the SMC5-SMC6 complex, a complex involved in DNA double-strand breaks by homologous recombination. The complex may promote sister chromatid homologous recombination by recruiting the SMC1-SMC3 cohesin complex to double-strand breaks. The complex is required for telomere maintenance via recombination in ALT (alternative lengthening of telomeres) cell lines and mediates sumoylation of shelterin complex (telosome) components which is proposed to lead to shelterin complex disassembly in ALT-associated PML bodies (APBs). Is involved in positive regulation of response to DNA damage stimulus. {ECO:0000269|PubMed:18086888}.

Molecular Weight: 44.3 kDa

UniProt: [Q9NXX6](#)

Pathways: [Positive Regulation of Response to DNA Damage Stimulus](#)

## 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.

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Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

## Handling

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Handling Advice: Avoid repeated freeze-thaw cycles.

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Storage: -80 °C

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Storage Comment: Store at -80°C.

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Expiry Date: Unlimited (if stored properly)