

# Datasheet for ABIN7549991 NSMCE1 Protein (AA 1-266) (His tag)



## Overview

Quantity:	1 mg
Target:	NSMCE1
Protein Characteristics:	AA 1-266
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NSMCE1 protein is labelled with His tag.

#### Product Details

Product Details	
Purpose:	Custom-made recombinant NSMCE1 Protein expressed in mammalian cells.
Sequence:	MQGSTRRMGV MTDVHRRFLQ LLMTHGVLEE WDVKRLQTHC YKVHDRNATV DKLEDFINNI
	NSVLESLYIE IKRGVTEDDG RPIYALVNLA TTSISKMATD FAENELDLFR KALELIIDSE
	TGFASSTNIL NLVDQLKGKK MRKKEAEQVL QKFVQNKWLI EKEGEFTLHG RAILEMEQYI
	RETYPDAVKI CNICHSLLIQ GQSCETCGIR MHLPCVAKYF QSNAEPRCPH CNDYWPHEIP
	KVFDPEKERE SGVLKSNKKS LRSRQH Sequence without tag. The proposed Purification-Tag
	is based on experiences 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.

- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

### **Target Details**

Alternative Name:

Target:	NSMCE1	

NSMCE1 (NSMCE1 Products)

Background:

Non-structural maintenance of chromosomes element 1 homolog (Non-SMC element 1 homolog) (EC 2.3.2.27),FUNCTION: RING-type zinc finger-containing E3 ubiquitin ligase that assembles with melanoma antigen protein (MAGE) to catalyze the direct transfer of ubiquitin from E2 ubiquitin-conjugating enzyme to a specific substrate. Within MAGE-RING ubiquitin ligase complex, MAGE stimulates and specifies ubiquitin ligase activity likely through recruitment and/or stabilization of the E2 ubiquitin-conjugating enzyme at the E3:substrate complex. Involved in maintenance of genome integrity, DNA damage response and DNA repair (PubMed:29225034, PubMed:20864041). NSMCE3/MAGEG1 and NSMCE1 ubiquitin ligase are components of SMC5-SMC6 complex and may positively regulate homologous recombination-mediated DNA repair (PubMed:18086888). MAGEF1-NSMCE1 ubiquitin ligase promotes proteasomal degradation of MMS19, a key component of the cytosolic iron-sulfur protein assembly (CIA) machinery. Down-regulation of MMS19 impairs the activity of several DNA repair and metabolism enzymes such as ERCC2/XPD, FANCJ, RTEL1 and POLD1 that require iron-sulfur clusters as cofactors (PubMed:29225034). {ECO:0000269|PubMed:18086888, ECO:0000269|PubMed:20864041, ECO:0000269|PubMed:29225034}.

# **Target Details**

Handling Advice:

Storage Comment:

Storage:

Expiry Date:

Molecular Weight:	30.9 kDa
UniProt:	Q8WV22
Pathways:	Positive Regulation of Response to DNA Damage Stimulus
Application Details	
Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for
	functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.

Avoid repeated freeze-thaw cycles.

-80 °C

Store at -80°C.

12 months