

**NSMCE1 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP18369b****Specification**

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**NSMCE1 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q8WV22](#)**NSMCE1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 197370**Other Names**

Non-structural maintenance of chromosomes element 1 homolog, Non-SMC element 1 homolog, 632-, NSMCE1

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**NSMCE1 Antibody (C-term) Blocking Peptide - Protein Information****Name** NSMCE1 ([HGNC:29897](#))**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:<a href="http://www.uniprot.org/citations/29225034" target="\_blank">29225034</a>, PubMed:<a href="http://www.uniprot.org/citations/20864041" target="\_blank">20864041</a>).

NSMCE3/MAGEG1 and NSMCE1 ubiquitin ligase are components of SMC5-SMC6 complex and may positively regulate homologous recombination-mediated DNA repair (PubMed:<a href="http://www.uniprot.org/citations/18086888" target="\_blank">18086888</a>).

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, FANCI, RTEL1 and POLD1 that require iron-sulfur clusters as cofactors (PubMed:<a href="http://www.uniprot.org/citations/29225034" target="\_blank">29225034</a>).

**Cellular Location**

Nucleus. Chromosome, telomere

**NSMCE1 Antibody (C-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**NSMCE1 Antibody (C-term) Blocking Peptide - Images****NSMCE1 Antibody (C-term) Blocking Peptide - Background**

Probable 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 (By similarity).

**NSMCE1 Antibody (C-term) Blocking Peptide - References**

Fujioka, Y., et al. J. Biol. Chem. 277(24):21585-21591(2002)