

### NSMCE1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18369b

### Specification

## NSMCE1 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	<u>Q8WV22</u>
Other Accession	<u>NP_659547.2</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	30855
Antigen Region	222-249

## NSMCE1 Antibody (C-term) - Additional Information

Gene ID 197370

### Other Names

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

#### Target/Specificity

This NSMCE1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 222-249 amino acids from the C-terminal region of human NSMCE1.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

NSMCE1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## NSMCE1 Antibody (C-term) - 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:<u>29225034</u>, PubMed:<u>20864041</u>). NSMCE3/MAGEG1 and NSMCE1 ubiquitin ligase are components of SMC5-SMC6 complex and may positively regulate homologous recombination-mediated DNA repair (PubMed:<u>18086888</u>). 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:<u>29225034</u>).

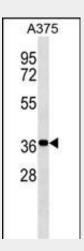
**Cellular Location** Nucleus. Chromosome, telomere

### NSMCE1 Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

NSMCE1 Antibody (C-term) - Images



NSMCE1 Antibody (C-term) (Cat. #AP18369b) western blot analysis in A375 cell line lysates (35ug/lane).This demonstrates the NSMCE1 Antibody detected the NSMCE1 protein (arrow).

## NSMCE1 Antibody (C-term) - 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) - References

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