

## Product datasheet for **AR51055PU-N**

### NSMCE1 (1-266, His-tag) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	NSMCE1 (1-266, His-tag) human protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MGSMQGSTRR MGVMTDVHRR FLQLLMTHGV LEEWDVKRLQ THCYKVHDRN ATVDKLEDFI NNINSVLESL YIEIKRGVTE DDGRPIYALV NLATTSISKM ATDFAENELD LFRKALELII DSETGFASST NILNLVDQLK GKKMRKKEAE QVLQKFVQNK WLIEKEGEFT LHGRAILEME QYIRETPDA VKICNICHSL LIQQQSCETC GI
Tag:	His-tag
Predicted MW:	33 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 20% glycerol, 1 mM DTT
Preparation:	Liquid purified protein
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<a href="#">NP_659547</a>
Locus ID:	197370
UniProt ID:	<a href="#">Q8WV22</a>
Cytogenetics:	16p12.1
Synonyms:	NSE1



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**Summary:**

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, FANCD1, RTEL1 and POLD1 that require iron-sulfur clusters as cofactors (PubMed:29225034).[UniProtKB/Swiss-Prot Function]

**Protein Families:**

Druggable Genome

**Product images:**