

## Product datasheet for **TP318073M**

### NSMCE1 (NM\_145080) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human non-SMC element 1 homolog ( <i>S. cerevisiae</i> ) (NSMCE1), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC218073 representing NM_145080 <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MQGSTRRMGVMTDVHRRFLQLLMTHGVLLEWDVKRLQTHCYKVHDRNATVDKLEDFINNINSVLESYIE  
IKRGVTEDDGRPIYALVNLATTSISKMATDFAENELDLFRKALELIIDSETGFASSTNILNLVDQLKGKK  
MRKKEAEQVLQKFVQNKWLIKIEGEGFTLHGRAILEMEQYIREYTPDAVKICNICHSLLIQGQSCETCGIR  
MHLPCVAKYFQSNAEPRCPHCNDYWPHEIPKVFDPKERESGVLKSNKKSLRSRQH

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-Myc/DDK
Predicted MW:	30.7 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="#">NP_659547</a>
Locus ID:	197370
UniProt ID:	<a href="#">Q8WV22</a>



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RefSeq Size: 1079

Cytogenetics: 16p12.1

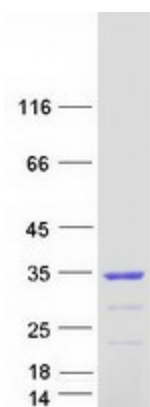
RefSeq ORF: 798

Synonyms: NSE1

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

**Protein Families:** Druggable Genome

### Product images:



Coomassie blue staining of purified NSMCE1 protein (Cat# [TP318073]). The protein was produced from HEK293T cells transfected with NSMCE1 cDNA clone (Cat# [RC218073]) using MegaTran 2.0 (Cat# [TT210002]).