

# **Product datasheet for TP318073**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

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

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human non-SMC element 1 homolog (S. cerevisiae) (NSMCE1), 20 μg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC218073 representing NM\_145080 or AA Sequence: Red=Cloning site Green=Tags(s)

MQGSTRRMGVMTDVHRRFLQLLMTHGVLEEWDVKRLQTHCYKVHDRNATVDKLEDFINNINSVLESLYI

Ε

 $IKRGVTEDDGRPIYALVNLATTSISKMATDFAENELDLFRKALELIIDSETGFASSTNILNLVDQLKGKK\\MRKKEAEQVLQKFVQNKWLIEKEGEFTLHGRAILEMEQYIRETYPDAVKICNICHSLLIQGQSCETCGIR$ 

MHLPCVAKYFQSNAEPRCPHCNDYWPHEIPKVFDPEKERESGVLKSNKKSLRSRQH

**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:** <u>NP 659547</u> **Locus ID:** 197370



#### NSMCE1 (NM\_145080) Human Recombinant Protein - TP318073

UniProt ID:Q8WV22RefSeq Size:1079Cytogenetics:16p12.1RefSeq ORF:798Synonyms: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

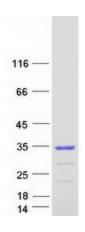
genome integrity, DNA damage response and DNA repair (PubMed:29225034,

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, FANCJ, 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]).