

Product datasheet for RC218073L4

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OriGene Technologies, Inc.

NSMCE1 (NM_145080) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: NSMCE1 (NM_145080) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: NSMCE1

Synonyms: NSE1

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC218073).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_145080

ORF Size: 798 bp





NSMCE1 (NM_145080) Human Tagged Lenti ORF Clone - RC218073L4

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 145080.3</u>, <u>NP 659547.2</u>

 RefSeq Size:
 1079 bp

 RefSeq ORF:
 801 bp

 Locus ID:
 197370

 UniProt ID:
 Q8WV22

 Cytogenetics:
 16p12.1

Protein Families: Druggable Genome

MW: 30.7 kDa

Gene 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,

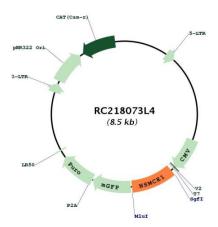
PubMed:20864041). NSMCE3/MAGEG1 and NSMCE1 ubiquitin ligase are components of SMC5-SMC6 complex and may positively regulate homologous recombination-mediated DNA repair (PubMed:18086888). MAGEF1-NSMCE1 ubiquitin ligase promotes proteasomal degradation of MMS19, a key component of the cytosolic iron-sulfur 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]



Product images:



Circular map for RC218073L4