

## Product datasheet for **SC314339**

### NSMase2 (SMPD3) (NM\_018667) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NSMase2 (SMPD3) (NM_018667) Human Untagged Clone
Tag:	Tag Free
Symbol:	SMPD3
Synonyms:	NSMASE2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

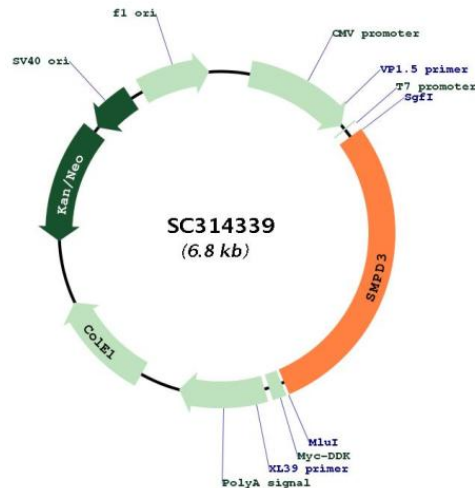


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Fully Sequenced ORF: >SC314339 representing NM\_018667.  
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGTTTTGTACACGACCCCTTTCTAACAGCTGTCTGTCCGCCCTGCACTGTGTGTCTCTGGGCCCTT
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CAGCGGGCAGACGACCCGTGCTGCCTGCAGCTGCTCTGCACTGCCCTCTTACGCCCATCTACCTGGCC
CTCCTGGTGGCCCTCGCTGCCCTTTGCGTTTCTCGGCTTTCTCTTCTGGTCCCCACTGCAGTCGGCCCGC
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GACACGAACGGCCTGTACGATGAGGATGTGTGCACCCCGACAACCTGCAGAAGGTCTGGAGAGTGAG
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GCCGAGGTGGAAGAATTCAGTTTTATACCCAGCTGTCCGGCCTGACGGACCACCTGCCAGTAGCCATG
CGACTGATGGTGTCTTCGGGGGAGGAGGAGGCA TAG
ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI

**Plasmid Map:**


**ACCN:** NM\_018667

**Insert Size:** 1968 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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:** [NM\\_018667.3](#)

**RefSeq Size:** 5269 bp

**RefSeq ORF:** 1968 bp

**Locus ID:** 55512

**UniProt ID:** [Q9NY59](#)

**Cytogenetics:** 16q22.1

<b>Domains:</b>	Exo_endo_phos
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Metabolic pathways, Sphingolipid metabolism
<b>MW:</b>	71.1 kDa
<b>Gene Summary:</b>	Catalyzes the hydrolysis of sphingomyelin to form ceramide and phosphocholine. Ceramide mediates numerous cellular functions, such as apoptosis and growth arrest, and is capable of regulating these 2 cellular events independently. Also hydrolyzes sphingosylphosphocholine. Regulates the cell cycle by acting as a growth suppressor in confluent cells. Probably acts as a regulator of postnatal development and participates in bone and dentin mineralization. [UniProtKB/Swiss-Prot Function]