

Product datasheet for **RG218441**

NSMase2 (SMPD3) (NM_018667) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NSMase2 (SMPD3) (NM_018667) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NSMase2
Synonyms:	NSMASE2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG218441 representing NM_018667
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTTTTGTACACGACCCCTTCTAACAGCTGTCTGTCCGCCCTGCACTGTGTCTCCTGGGCCCTTA
 TCTTTCCATGCTACTGGCTGGTGGACCGGCTCGCTGCCTCCTTCATACCCACCACCTACGAGAAGCGCCA
 GCGGGCAGACGACCCGTGCTGCCTGCAGCTGCTCTGCACTGCCCTCTTACGCCCATCTACCTGGCCCTC
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 AGGCA

ACGCGTACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

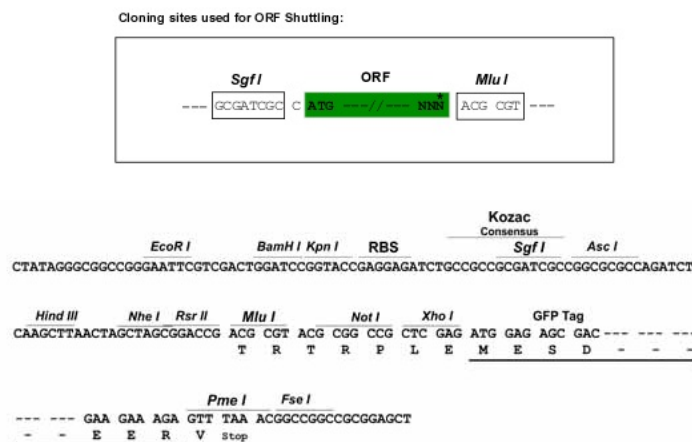
Protein Sequence: >RG218441 representing NM_018667
Red=Cloning site Green=Tags(s)

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MVLYTTPFPNSCLSALHCVSWALIFPCYWLVDRLAASFIPTTYEKQRADDPCCQLLCTALFTPIYLAL
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VNNLFNTQARAKEIGQIRNGAARPQIKIYIDSPTNTSISAASFSSLVSPQGGDVARAVPGSIKRTASV
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NHNQQDGDGSLGSPASRESLVKGRAGPDTASGEPGANSKLLYKASVVKAAAARRRRHPDEAFDHEVS
AFFPANLDFLCLQEVFDKRAATKLKEQLHGIFYEYLYDVGVYGCQGCCSFKCLNSGLLFFASRYPIMDVAY
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DVCTPDNLQKVLSEEGRREYLAFPTSKSSGQKGRKELLKGNRRRIDYMLHAEGLCPDWKAEVEEFSFI
TQLSGLTDHLPVAMRLMVSSGEEEA
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018667

ORF Size: 1965 bp

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: [NM_018667.2](#), [NP_061137.1](#)

RefSeq Size: 5284 bp

RefSeq ORF: 1968 bp

Locus ID: 55512

UniProt ID: [Q9NY59](#)

Cytogenetics: 16q22.1

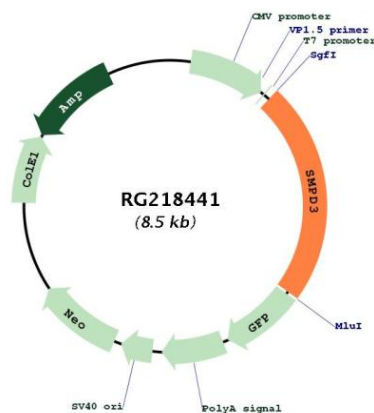
Domains: Exo_endo_phos

Protein Families: Transmembrane

Protein Pathways: Metabolic pathways, Sphingolipid metabolism

Gene Summary: 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]

Product images:



Circular map for RG218441