

Product datasheet for **RG200417**

nSMase (SMPD2) (NM_003080) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | nSMase (SMPD2) (NM_003080) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | SMPD2 |
| Synonyms: | ISC1; NSMASE; NSMASE1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| ORF Nucleotide Sequence: | >RG200417 representing NM_003080 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCCCAACTTCTCCCTGCGACTGCGGATCTTCAACCTCAACTGCTGGGGCATTCCGTA
ACTTGAGCAAGCACCAGGCGGACCGCATGAGGCGCCTGGGAGACTTTCTGAACCAGGAGAGCTTCGACCTGGCTTTGCT
GGAGGAGGTGGAGTGAGCAGGACTTCCAGTACCTGAGACAGAAGCTGTACCTACCTACCCAGCTGCA
CACCCTCCGGAGCGGAATCATTGGCAGTGGCCTCTGTGTCTTCTCAAACATCCAATCCAGGAGCTTA
CCCAGCACATCTACTCTCAATGGCTACCCCTACATGATCCATCATGGTGACTGGTTCAGTGGGAAGGC
TGTGGGCTGCTGGTGTCCATCTAAGTGGCATGGTGCTCAACGCCTATGTGACCCATCTCCATGCCGAA
TACAATCGACAGAAGGACATCTACCTAGCACATCGTGTGGCCAAAGCTTGGGAATTGGCCAGTTTATCC
ACCACACATCCAAGAAGGAGCAGAGCTGGTCTGTGTGGGAGACCTCAACATGCACCCAGAAGACCTGGG
CTGCTGCCTGCTGAAGGAGTGGACAGGGCTTATGATGCCTATCTTGAACTCGGGACTTCAAGGGCTCT
GAGGAAGGCAACACAATGGTACCAAGAAGTGTACGTCAGCCAGCAGGAGCTGAAGCCATTTCCCTTTG
GTGTCCGATTGACTACGTGCTTACAAGGCAGTTTCTGGGTTTACATCTCCTGTAAGAGTTTTGAAAC
CACTACAGGCTTTGACCCTCACAGTGGCACCCCTCTCTGATCATGAAGCCCTGATGGCTACTCTGTTT
GTGAGGCACAGCCCCACAGCAGAACCCAGCTCTACCCAGGACCAGCAGAGAGGTGCGCGTTGATGT
GTGTGCTAAAGGAGGCTGGACGGAGCTGGGTCTGGGCATGGCTCAGGCTCGCTGGTGGCCACCTTCGC
TAGCTATGTGATTGGCCTGGGGCTGCTTCTCCTGGCACTGCTGTGTGCTCCTGGCGCTGGAGGAGGGCC
GGGAAGCTGCCATACTGCTCTGGACCCCAAGTGTAGGGCTGGTGTGGGCGAGGTGATTCTACCTCT
TCCACGTACAGGAGTCAATGGCTTATATAGGGCCAGGCTGAGCTCCAGCATGTGCTAGGAAGGGCAAG
GGAGGCCAGGATCTGGGCCAGAGCCTCAGCCAGCCCTACTCTGGGCAGCAGGAGGGGGACAGA
AAAGAACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG200417 representing NM_003080
 Red=Cloning site Green=Tags(s)

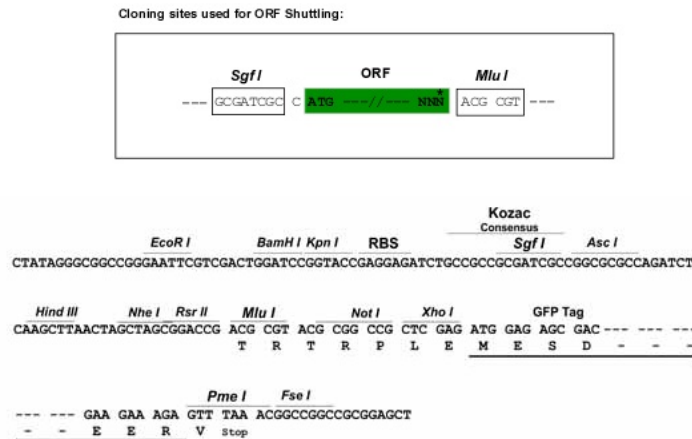
MKPNFSLRLRIFNLNCWGIPLYLSKHRADRMRLGDFLNQESFDLALLEEVWSEQDFYLRQKLSPYPA
 HHFRSGIIGSGLCVFSKHPIQELTQHIYTLNGYPYMIHHGDWFSKAVGLLVHLSGMVLNAYVTHLHAE
 YNRQKDIYLAHRVAQAWELAQFIHHTSKKADVLLCGDLNMHPEDLGCCLLKEWTLHDAYLETDRDFKGS
 EEGNTMVPKNCYVSQQLKPFPGVVRIDYVLYKAVSGFYISCKSFETTTGFDPHSGTPLSDHEALMATLF
 VRHSPPQNPSSSTHGPAERSPLMVCVLKEAWTELGLGMAQARWWATFASYVIGLGLLLLALLCVLAAGGGA
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 KEQ

TRTRPLE - GFP Tag - V

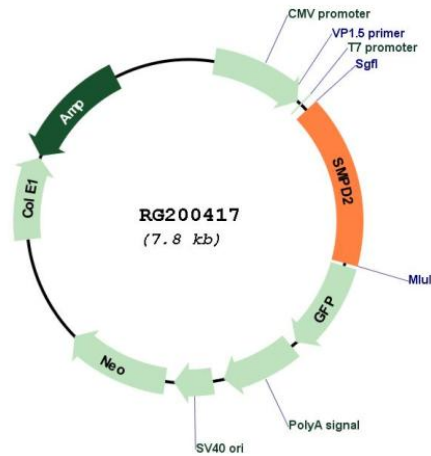
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM_003080

| | |
|-------------------------------|---|
| ORF Size: | 1269 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: | <ol style="list-style-type: none">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_003080.2 , NP_003071.2 |
| RefSeq Size: | 1697 bp |
| RefSeq ORF: | 1272 bp |
| Locus ID: | 6610 |
| UniProt ID: | O60906 |
| Cytogenetics: | 6q21 |
| Domains: | Exo_endo_phos |
| Protein Families: | Transmembrane |
| Protein Pathways: | Metabolic pathways, Sphingolipid metabolism |
| Gene Summary: | This gene encodes a protein which was initially identified as a sphingomyelinase based on sequence similarity between bacterial sphingomyelinases and a yeast protein. Subsequent studies showed that its biological function is less likely to be as a sphingomyelinase and instead as a lysophospholipase. [provided by RefSeq, Oct 2009] |