

Product datasheet for **MC202307**

Smpd3 (NM_021491) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smpd3 (NM_021491) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Smpd3
Synonyms:	4631433G07Rik; AI427456; AW537966; fro; nSMase2
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC046980 sequence for NM_021491
 GGCTCATCACCCCTTCAGGTCCTGATTGCTTGGACCTCCTGTCTCCAGAGGCAAGGACACAAGGCCAAAG
 AGGCCCTCCTCAGGTTTTTCAGCAGACTCCGGTGTCCCAGCATGGCCCTTGAAGCGAACCATGACTGTC
 TGTGGGACTCGCCACTGATCATCCAGAGTACATCTCACCAGGAGGTGACCTCTCCTCCATCCTCCAC
 CTGCCCTGCTGGGACAGTGTGCGGCTGCCACGGACACCATGTAGTAGAGCCGGCTGCGGCGCCAG
 TGAGCTGCAATGGTTTTGTACACGACCCCTTTCTAATAGCTGTCTGTCTGCCCTCCACGCCGTCTCT
 GGGCCCTCATCTCCCATGTTACTGGCTGGTGGACCGGCTGTTGGCCCTTTTCATACCCACCACCTATGA
 GAAGCGCCAGAGGCGAGATGACCCCTGCTGCCTGCAGCTGTTCTGCACGGTCTCTTACGCCAGTCTAC
 CTGGCTCTGCTTGTGGCTGCACTGCCCTTTCGCTTCTCGGGTTCATCTTCTGGTCTCCACTGCAGTCTG
 CCCGCCGGCCCTACTCTACTCCCGGCTAGAAGACAAGAACCAGCTGGTGGGCGAGCCCTGCTTAGTGA
 ATGGAAGGGCACGGGGCAGGCAAAAGCTTTTGTCTCGCCACGGCCAATGTCTGCCTCCTCCCGACTCA
 CTCGCGAGGCTCAATAATGTGTTCAACTCAAGCTCGGGCCAAAGAGATTGGGCAGAGAATCCGCAATG
 GGGCCGCCAGGCCTCAGATCAAGATCTACATCGATTCTCCACCAACACCTCCATCAGTGCAGCCAGCTT
 CAGCAGCCTGGTGTGCCACAGGGTGGTATGGATCCAGAGCTGTTCTGGGAGCATTAAAGAGGACAGCC
 TCTGTGGAATACAAGGGGGATGGTGGGCGTCACCCAGCGACGAGCTGCCAACGGCCAGCCTCTGGAG
 AACAGGCTGACGGAAGCCTTGGAGCAGCTGCATTGTGCGAATTGGTGGCGAGGAAGGAGGTCGGCCACA
 AGAAGCTGATGACCTGCTGCCGGGAGCAAGCCAGGAATGGGGCTGGTGGGACCCCAAAGGGCCAGACA
 CCCAACCAACAATCAGCGAGATGGGGATTCTGGGAGCCTGGGCAGCCCTCAGCCTCCAGGGAGTCTTTGG
 TGAAGGCACGGGCTGGGCAAGACAGTGGTGGCAGCGGAGGCCAGGGGCTAACAGCAAGCTGCTGTATAA
 GACCTCTGTGGTGAAGAAGGCAGCAGCCCGAGGAGGCCACCTGATGAAGCCTTTGACCACGAGGTC
 TCAGCCTCTTCCCGCCAATCTGGACTTCTGTGCCTGCAGGAGGTGTTGACAAGCGTGGGCTGCTA
 AGTTGAAAGAGCAGCTACACGGCTACTTCGAGTACATCCTGTATGATGTTGGGGTCTACGGTTGTATGG
 TTGCTGCAATTTCAAATGTCTAACAGCGGTCTCTTCTTCCAGCCGCTACCCTGTCTGGAGCTGGCC
 TATCACTGTTACCCCAATGGGTGCAGCTTCGATGCCCTGCCTTAAGGGAGCTCTGTTTTCAAGGTGC
 AGGTGGGAAGCACACCTCAGGACCAAAGAATTGTTGGGTACATCGCTGCACACCTGCATGCCCCACC
 AGAGGACAGTGCCGTCCGGTGTGAGCAGCTGGACCTGCTTCAAGACTGGCTGGTGGTATTTCCGAAAATCT
 ACCTCCTCGACCAGCACAGCCAACCCCGAGGAGCTGGTGGTGTGTTGACGTCATCTGTGGAGATTTGAACT
 TTGATAACTGCTTCTGATGACAACTGGAGCAGCAGCACTCGCTTTTACTCGCTACAAAGACCCCTG
 CCGCCTTGGGCCGGGAGGAGAAGCCTTGGGCCATTGGCACCTGCTGGACACAACCGTCTCTATGAT
 GAGGATGTGTGTACCCCGACAACCTTCAAAGGTGTTGGAGAGCGAGGAAGGCCGAGGGAGTATCTGG
 CCTTCCCACCAGCAAGAGCCCAGGTGCTGGGCAGAAGGGCCGGAAGGATCTGCTGAAGGCAATGGCCG
 CCGCATCGACTACATGCTGCACGCCGAGGAGGGCTGTGCCCTGACTGGAAGGCTGAGGTAGAAGAATTC
 AGTTTTATCACCCAGCTGTCCGGCTGACCGACCCTCCCGTGGCCATGCGGGTGTGGTGTCTGCAG
 GGAAGAGGAGGCATAGACCAGCCATGCCACGGTCTCGAGCAGTAGGGCCTCTGCCGGCCCTTAAGCCA
 CAGCCCGTGCCTGGGCTGTGTGCCCTCCATTGAGCACCCAGTGTGGGGGAAGGAGGGCAGGGGACAGGG
 AAGGACGAGCCCATCAATCCCCTGCAAGCTGGGAACCAAGGCTGCTGTGCCTCTGGGCCAACTCTGCG
 GACAGAGGACTTGGGCCAGCCTGGGAGCCCGGCTGCCTGACCAGTGCATTCTTTCAAGTACAGATTTT
 CTACAGAAATACACAGCACAACCTAGTTTGTAAACCAAGGGTTAGTACGAGGACCGGGTTTCTGTACTCT
 TTGTATCTTCTCAAGCTTTGTCCAGGGTTCATTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

- Restriction Sites:** RsrII-NotI
- ACCN:** NM_021491
- 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).
- 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: [BC046980](#), [AAH46980](#)

RefSeq Size: 2654 bp

RefSeq ORF: 1968 bp

Locus ID: 58994

UniProt ID: [Q9JLY3](#)

Cytogenetics: 8 D3

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. Acts as a regulator of postnatal development and participates in bone and dentin mineralization. Overexpression enhances cell death, suggesting that it may be involved in apoptosis control.
[UniProtKB/Swiss-Prot Function]