

## Product datasheet for **MR218291**

### Smpd4 (NM\_001164609) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Smpd4 (NM_001164609) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Smpd4
Synonyms:	4122402O22Rik; mKIAA1418
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MR218291 representing NM\_001164609  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGTTCCCTCACCTACAACAGCCTAGTTTCCTTCTGGCTAGCCTGAAAGCTGACTCTATAAATAAGC  
 CCTTTGCAACAACGTTGCCAAGATTTGGTGAAAGTCATTGAGGATTTCCAGCCAAGGAATTGCATGCCGT  
 CTTCCCATGGCTGGTGGAAAGCATCTTTGGCAGCCTGGATGGTGTCTTGTGGTTGGAATCTCCGATGC  
 CTACAGGGACGTGTGAACCCTGTGGAGTACAGCACAGCGATGGAATTTCTAGACCCAAGTGGTCCAATGA  
 TGAAGTTGGTTTATAAATTCAAGCTGAAGACTATAACTTTGATTTTCTGTCTCCTGTCTTCTGGCCC  
 TGTGAAGGCATCCATTCAAGAGAATGTCCTCCCTGACAGTCTCTGTACCACAACAAAGTCCAGTTTCCC  
 CCGACCGGAGGCCTTGGCCTGAACCTGGCCCTCAATCCATTTGAATACTATATGTTCTACTTTGCTTTGA  
 GCCTCATCTCTAAAAGCCAATGTCTATGACCCTCCATGTCCGTACTTCGGACTGTGCCTATTTACCCCT  
 GGTGGATAGGTACCTATCATGGTTCCTACCCACTGAAGGCAGCGTACCTCCACCCTCTGTCCAGTCCA  
 GGAGGCTCCAGCCCTCACAGCTCCCAGAACACCAGCCATGCCCTTTCCTCCTATGGCCTCCACACTA  
 GCCTCTTGAAGCGACACATCTCTCATCAGACATCTGTGAATGCAGACCCTGCATCCCATGAGATCTGGCG  
 GTCAGAACTCTCCTCCAGTTTTTGTGGAAATGTGGCTTCATCATTACTCCCTGGAGATGTACAAAAA  
 ATGCAGTCCCCTCATGCCAAGGAGTCTTCACGCCTACTGAAGAGCACGTGCTGGTGGTACGCCTGCTGC  
 TGAAGCACCTGCATGCCTTTGCCAACAGCCTGAAGCCAGATCAGGCTTCGCCATCTGCACACTCCCATGC  
 CACCAGTCCGCTGGAGGAATCAAACGGGCCGAGTGCCTCGCTTGTCCAGCAGAAGCTGTACGTCTTC  
 CTGCAGCACTGTTTTGGCCACTGGCCTCTGGATGCAACCTTCAGAGCTGTCTGGAGATGTGGCTGAGCT  
 ACCTGCAGCCATGGAGGTATGCCCTGAGAAACAGGCTCAGGGCAGCGATCCCCAGCCACGGTGTGTGTC  
 AGAGAAGTGCCTGGCTCCATGGTCAACCCTATCAGCACAGAGGACTGAGGGCACCCCTTCATCCAGGAAAAC  
 CTGCTGATGTACACCAAGCTGTTTGTGAGCTTTCTGAACCGTGCCTACGCACAGACCTTGTGAGCCCCA  
 AGAATGCACTCATGGTCTCCGAGTGGTAAGGTCTTTGCCAGCCCAACCTGGTGAGATGATCCAGAA  
 AGGTGAGCAGCTGTTCTGGAGCCGGAGCTCATCATCCCCACCGCCAACACCGGCTCTTACAGTCACC  
 ACCAGTTCCTGTCAACATGGCCCCCTGTTGTGACAGATGCCTCCTTCAAGGTGAAGAGCCATGTCTATA  
 GCCTAGAGGGCCAAGACTGCAAATATACCCCAATGTTTGGTCTGAAATCCGAACCCCTGGTCTTGGCCT  
 TGCTCAGCTCATCACACAGGCCAAGCAGACTGCCAAGTCCATCTCTGATCAGTATGTGAAAGCCCAACT  
 GGCCGCTCCTTCTGTGATGGCTGACCTTTGGCCTCACAGACACAAATAGCTGTACCCAGCCAATGACC  
 TGGATGAAATAGGTCAGGACAGCATCCGCAAGACAGACGAGTACTTAGAAAAGGCCCTGGAGTACCTGCG  
 CCAGATATTCCGGCTCAGCGAAGCCAGCTGGCCAGCTCACGCTTGCCTGGGGAGTGTCTGGGACGAG  
 AATGGGAAGCAGCAGCTCCCAGATTGCATTGTGGGGGAAGAAGGACTCATCCTTACACCCTTGGGCCGCT  
 ACCAGATCATTAAATGGTCTGCGAAGGTTGAGATTGAGTACCAGGGAGACTTAGAGCTGCAGCCCATCCG  
 GAGCTACGAAATCACCAGTCTGGTCCGTGCACTCTTCCGGCTGTCTCTGCCATCAACCGTAGATTTGCA  
 GGCCAGATGGCAGCTCTGTGCTCCCGAATGACTTCTTGGCAGCTTCTGTGCTACCACCTCACTGAGC  
 CTGCCTTGAGCAACAGACATCTGCTGAGCCCTGTAGGGCGGAGGCAGGTACCAATCTGCACGGGGCCC  
 CAGGCTCAGCCTCCGTTTCTGGGCAGTTACCGGACACTGCTCCTGCTCCTGATGGCCTTCTTTGTGGCT  
 TCTCTGTTCTGCATTGGGCCCTGTCTGCTCCTTGTCTCCTAGGATACGTCCTCTATGCCATAG  
 CTATGACTGCTCACTGAACGGGGGAAGCTGCACCAGCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR218291 representing NM\_001164609  
 Red=Cloning site Green=Tags(s)

MAFPHLQQPSFLLASLKADSINKPFAQRCQDLVKVIEDFPAKELHAVFPWLVESIFGSLDGVLVGWNLRC  
 LQGRVNPVEYSTAMEFLDPSGPMMLVYKLQAEDYNDFPVSCLPGPVKASIQENVLPDSPLYHNKVQFP  
 PTGGLGLNLALNPFYEMFYFALSLSIQKPMSTLHVRTSDCAYFTLVDRYLSWFLPTEGSVPPPLCSSP  
 GGSSPSPAPRTPAMPFASYGLHTSLLKRHISHQTSVNADPASHEIWRSETLLQVFVEMWLHHYSLEMYQK  
 MQSPHAKESFTPTTEHVLVVRLLLKHLHAFANSLKPDQASPSAHSHATSPLLEEFKRAAVPRFVQQKLYVF  
 LQHCFGHWPLDATFRAVLEMWLSYLQPWRYAPEKQAQGSQPQRCVSEKCLAPWSPYQHRGLRAPFIQEN  
 LLMYTKLFFVSFLNRALRTDLVSPKNALMVFRVAKVFAQPNLAEMIQKGEQLFLEPELIIPHRQHRLFTVT  
 TSFLSPWPPVTDASFVKVSHVYSLEGQDCKYTPMGPEIRTLVLRQAQLITQAKQTAKSISDQYVESPT  
 GRSFLSWLTFGLTDTNSCYPANDLDEIGQDSIRKTDEYLEKALEYLRQIFRLSEAQLAQLTLALGSARDE  
 NGKQQLPDCIVGEEGLILTPLGRYQIINGLRRFEIEYQGDLELQPIRSYEITSLVRALFRLSSAINRRFA  
 GQMAALCSRNDFLGSFCRYHLTEPALSNRHLLSPVGRRQVTNPARGPRLSLRFLGSYRTLLLLLMAFFVA  
 SLFCIGPLSCSLLLVLGYVLYAIAMTLLTERGKHLHQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM\_001164609

ORF Size: 2421 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\\_001164609.1](#), [NP\\_001158081.1](#)

**RefSeq Size:** 4584 bp

**RefSeq ORF:** 2424 bp

**Locus ID:** 77626

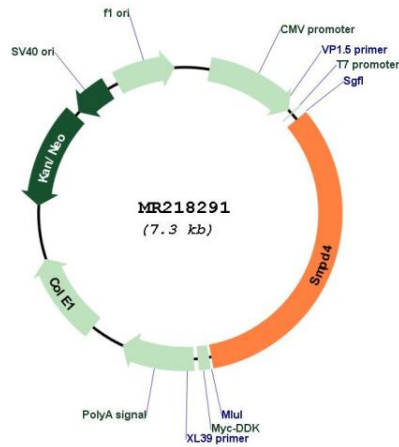
**UniProt ID:** [Q6ZPR5](#)

**Cytogenetics:** 16 A3

**MW:** 92 kDa

**Gene Summary:** Catalyzes the hydrolysis of membrane sphingomyelin to form phosphorylcholine and ceramide. May sensitize cells to DNA damage-induced apoptosis.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR218291