

## Product datasheet for **MR219037**

### **Smpd4 (NM\_029945) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Smpd4 (NM_029945) 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)



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ORF Nucleotide  
Sequence:

>MR219037 representing NM\_029945  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGCGTTCCCTCACCTACAACAGCCTAGTTTCCTTCTGGCTAGCCTGAAAGCTGACTCTATAAATAAGC  
CCTTTGACAACGTTGCCAAGATTTGGTAAAAGTCATTGAGGATTTCCAGCCAAGGAATTGCATGCCGT  
CTTCCCATGGCTGGTGGAAAGCATCTTTGGCAGCCTGGATGGTGTCTTGTGGTTGGAATCTCCGATGC  
CTACAGGGACGTGTGAACCCTGTGGAGTACAGCACAGCGATGGAATTTCTAGACCCAAGTGGTCCAATGA  
TGAAGTTGGTTTATAAATTCAAGCTGAAGACTATAACTTTGATTTTCTGTCTCCTGTCTTCTGGCCC  
TGTGAAGGCATCCATTCAAGAGAATGTCCTCCCTGACAGTCTCTGTACCACAACAAAGTCCAGTTTCCC  
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GCCTCTTGAAGCGACACATCTCTCATCAGACATCTGTGAATGCAGACCCTGCATCCCATGAGATCTGGCG  
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GGTGGTACGCCTGCTGTGAAGCACCTGCATGCCTTTGCCAACAGCCTGAAGCCAGATCAGGCTTCGCCA  
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CCGGAGCTCATCATCCCCACCGCCAACACCGGCTCTTACAGTACCACCAGCTTCTGTACCATGGC  
CCCCTGTTGTGACAGATGCCTCCTCAAGGTGAAGAGCCATGTCTATAGCCTAGAGGGCCAAGACTGCAA  
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AAGCAGACTGCCAAGTCCATCTCTGATCAGTATGTGAAAAGCCCAACTGGCCGCTCCTTCTGTGATGGC  
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CATCCGCAAGACAGACGAGTACTTAGAAAAGGCCCTGGAGTACCTGCGCCAGATATTCCGGCTCAGCGAA  
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GGCAGTTACCGGACACTGCTCCTGCTCCTGATGGCCTTCTTTGTGGCTTCTCTGTTCTGCATTGGGCCCC  
TGTCTGCTCCTTGTCTGCTTAGGATACGTCCTCTATGCCATAGCTATGACTGCTCACTGAACG  
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**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR219037 representing NM\_029945  
Red=Cloning site Green=Tags(s)

MAFPHLQQPSFLLASLKADSINKPFAQRCQDLVKVIEDFPAKELHAVFPWLVESIFGSLDGVLVGWNLRC  
LQGRVNPVEYSTAMEFLDPSGPMMLVYKLQAEDYNDFPVSCLPGPVKASIQENVLPDSPLYHNKVQFP  
PTGGLGLNLALNPFYEMFYFALSLSISQKPMSTLHVRTSDCAYFTLVDRYLSWFLPTEGSVPPPLCSSP  
GGSSPSPAPRTPAMPFASYGLHTSLLKRHISHQTSVNADPASHEIWRSETLLQVFVEMWLHHYSLEMYQK  
MQSPHAKLEVLHYRLTVSSALHSPAQPSLQALHAYQESFTPTEEHVLVVRLLKHLHAFANSLKPDQASP  
SAHSHATSPLEEFKRAAVPRFVQKLYVFLQHCFGHWPLDATFRAVLEMWLSYLQPWRYAPEKQAQGSDP  
QPRCVSEKWAPFIQENLLMYTKLFVSFLNLRALRTDLVSPKNALMVFRVAKVFAQPNLAEMIQKGEQLFLE  
PELIIPHRQHRLFTVTTSFLSPWPPVVDASFVKSHVYSLEGQDCKYTPMGPEIRTLVRLAQLITQA  
KQTAKSISDQYVESPTGRSFLSWLTFGLTDTNSCYPANDLDEIGQDSIRKTDEYLEKALEYLRQIFRLSE  
AQLAQLTLALGSARDENGKQQLPDCIVGEEGLILTPLGRYQIINGLRRFEIEYQGDLELQPIRSYEITSL  
VRALFRLSSAINRRFAGQMAALCSRNDFLGSFCRYHLTEPALSNRHLLSPVGRRQVTNPARGPRLSLRFL  
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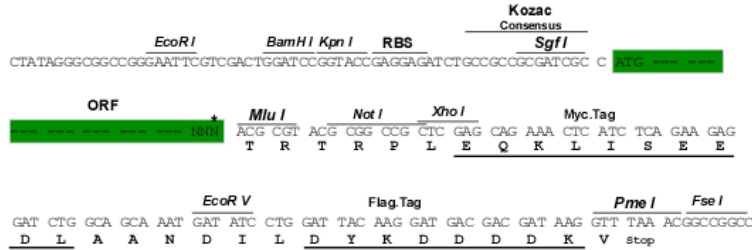
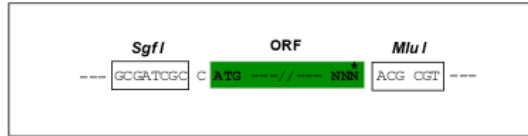
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9003\\_h04.zip](https://cdn.origene.com/chromatograms/mm9003_h04.zip)

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

- ACCN:** NM\_029945
- ORF Size:** 2469 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\\_029945.3](#), [NP\\_084221.2](#)

**RefSeq Size:** 4632 bp

**RefSeq ORF:** 2472 bp

**Locus ID:** 77626

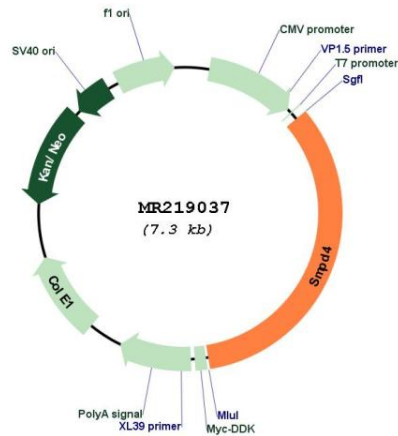
**UniProt ID:** [Q6ZPR5](#)

**Cytogenetics:** 16 A3

**MW:** 93.7 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 MR219037