

Product datasheet for **MG219037**

Smpd4 (NM_029945) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smpd4 (NM_029945) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Smpd4
Synonyms:	4122402O22Rik; mKIAA1418
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG219037 representing NM_029945
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGTTCCCTCACCTACAACAGCCTAGTTTCCTTCTGGCTAGCCTGAAAGCTGACTCTATAAATAAGC
 CCTTTGACAACGTTGCCAAGATTTGGTAAAAGTCATTGAGGATTTCCAGCCAAGGAATTGCATGCCGT
 CTTCCCATGGCTGGTGGAAAGCATCTTTGGCAGCCTGGATGGTGTCTTGTGGTTGGAATCTCCGATGC
 CTACAGGGACGTGTGAACCCTGTGGAGTACAGCACAGCGATGGAATTTCTAGACCCAAGTGGTCCAATGA
 TGAAGTTGGTTTATAAATTCAAGCTGAAGACTATAACTTTGATTTTCTGTCTCCTGTCTTCTGGCCC
 TGTGAAGGCATCCATTCAAGAGAATGTCCTCCCTGACAGTCTCTGTACCACAACAAAGTCCAGTTTCCC
 CCGACCGGAGGCCCTTGGCCTGAACCTGGCCCTCAATCCATTTGAATACTATATGTTCTACTTTGCTTTGA
 GCCTCATCTCTAAAAGCCAATGTCTATGACCCTCCATGTCCGTACTTGGACTGTGCCTATTTACCCT
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 GGAGGCTCCAGCCCTCACAGCTCCCAGAACACCAGCCATGCCCTTTGCCTCCTATGGCCTCCACACTA
 GCCTCTTGAAGCGACACATCTCTCATCAGACATCTGTGAATGCAGACCCTGCATCCCATGAGATCTGGCG
 GTCAGAAACTCTCCTCCAGGTTTTGTGGAAATGTGGCTTTCATCACTCCCTGGAGATGTACCAAAAA
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 GGTGGTACGCCTGCTGCTGAAGCACCTGCATGCCTTTGCCAACAGCCTGAAGCCAGATCAGGCTTCGCCA
 TCTGCACACTCCCATGCCACCAGTCCGCTGGAGGAATTCAAAACGGGCCGAGTGCCTCGCTTTGTCCAGC
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 GTCGGTCACTCTCCGGCTGTCTCTGCCATCAACCGTAGATTTGCAGGCCAGATGGCAGCTCTGTGCT
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 GCTGAGCCCTGTAGGGCGGAGGACAGTCAACCAATCCTGCACGGGGCCCAAGGCTCAGCCTCCGTTTCTG
 GGCAGTTACCGGACACTGCTCCTGCTCCTGATGGCCTTCTTTGGCTTCTCTGTTCTGCATTGGGCCCC
 TGTCTGCTCCTTGTCTGCTTAGGATACGTCCTCTATGCCATAGCTATGACTGCTCACTGAACG
 GGGGAAGCTGCACCAGCTC

ACGGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

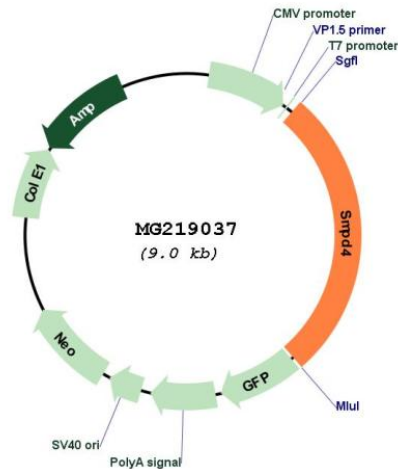
Protein Sequence: >MG219037 representing NM_029945
Red=Cloning site Green=Tags(s)

MAFPHLQQPSFLLASLKADSINKPFAQRCQDLVKVIEDFPAKELHAVFPWLVESIFGSLDGVLVGWNLRC
LQGRVNPVEYSTAMEFLDPSGPMMLVYKLAEDYNDFPVSCLPGPVKASIQENVLPDSPLYHNKVQFP
PTGGLGLNLALNPFYEMFYFALSLSIQKPMSTLHVRTSDCAYFTLVDRYLSWFLPTEGSVPPPLCSP
GGSSPSPAPRTPAMPFASYGLHTSLLKRHISHQTSVNADPASHEIWRSETLLQVFVEMWLHHYSLEMYQK
MQSPHAKLEVLHYRLTVSSALHSPAQPSLQALHAYQESFTPEEHVLLVRRLLKHLHAFANSLKPDQASP
SAHSHATSPLEEFKRAAVPRFVQKLYVFLQHCFGHWPLDATFRAVLEMWLSYLQPWRYAPEKQAQGSDP
QPRCVSEKWAPFIQENLLMYTKLFVSFLNRLRTDLVSPKNALMVFRVAKVFAQPNLAEMIQKGEQLFLE
PELIIPHRQHRLFTVTTSSFLSPWPPVVDASFVKSHVYSLEGQDCKYTPMGPEIRTLVRLAQLITQA
KQTAKSISDQYVESPTGRSFLSWLTFGLTDTNSCYPANDLDEIGQDSIRKTDEYLEKALEYLRQIFRLSE
AQLAQLTLALGSARDENGKQQLPDCIVGEEGLILTPLGRYQIINGLRRFEIEYQGDLELQPIRSYEITSL
VRALFRLSSAINRRFAGQMAALCSRNDFLGSFCRYHLTEPALSNRHLLSPVGRRQVTNPARGPRLSLRFL
GSYRTLTLMLMAFFVASLFCIGPLSCSLLLVLGYVLYAIAMTLLTERGKLHQL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Plasmid Map:



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

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]