

Product datasheet for MR206649

Smpd2 (NM_009213) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smpd2 (NM_009213) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Smpd2
Synonyms:	AW108287; nSMase; nSMase1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206649 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGCTCAACTTTTCTCTACGGCTGAGAGTTTCAATCTCAACTGCTGGGACATCCCCTACCTGAGCA
 AACATAGGGCGGACCGCATGAAGCGCTTGGGAGACTTTCTGAACCTGGAAACTTTGATCTGGCTCTCCT
 GGAGGAGGTGTGGAGTGAGCAGGACTTCCAGTACCTAAGGCAAAGGCTATCGCTCACCTATCCAGATGCA
 CACTACTTCAGAAGCGGGATGATAGGCAGTGGCCTCTGTGTCTTCTCAAACACCCAATCCAGGAAATCT
 TCCAGCATGTCTACAGTCTGAATGGTTACCCCTACATGTTCCATCATGGAGACTGGTTCTGTGGGAAGTC
 TGTGGGGCTGCTGGTGTCCGTCTAAGTGGACTGGTGTCAATGCCTACGTGACTCATCTACATGCTGAG
 TACAGCCGACAGAAGGACATCTACTTTGCACACCGTGTGGCCCAAGCTTGGGAAGTGGCCAGTTTATCC
 ACCACACATCCAAGAATGCAGATGTGGTTCTATTGTGTGGAGACCTCAATATGCACCCCAAGACCTGGG
 CTGCTGCCTGCTGAAAGAGTGGACAGGGCTCCATGATGCTTTCGTTGAGACTGAGGACTTTAAGGGCTCT
 GATGATGGCTGTACCATGGTACCAAGAAGTGTACGTCAGCCAGCAGGACCTGGGACCGTTTCCGCTCTG
 GTATCCGATTGATTACGTGCTTTACAAGGCAGTCTCTGAGTTCACGCTGCTGTGAGACTCTGAAAC
 CACTACAGGCTGTGACCCCTCACAGTGACAAGCCCTTCTCTGATCACGAGGCCCTCATGGTACTTTGTAT
 GTGAAGCACAGCCCCCTCAGGAAGACCCCTGTACTGCCTGTGGCCCACTGGAAGGTCCGATTTGATCA
 GCGTGCTAAGGGAGGCCAGGACAGAGCTGGGGCTAGGCATAGCTAAAGCTCGCTGGTGGGCTGCATTCTC
 TGGCTATGTGATCGTTTGGGGGCTGTCCCTTCTGGTGTGCTGTGTCTGGCTGCAGGAGAAGAGGCC
 AGGGAAGTGGCCATCATCTCTGCATACCCAGTGTGGTCTGGTGTGAGCAGGTGCAGTCTACCTCT
 TCCACAAGCAGGAGGCCAAGGGCTTATGTCGGGCCAGGCTGAGATGCTGCACGTTCTGACAAGGGAAAC
 GGAGACCCAGGACCGAGGCTCAGAGCCTCACCTAGCCTACTGCTTGCAGCAGGAGGGGACAGAGCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >MR206649 protein sequence
 Red=Cloning site Green=Tags(s)

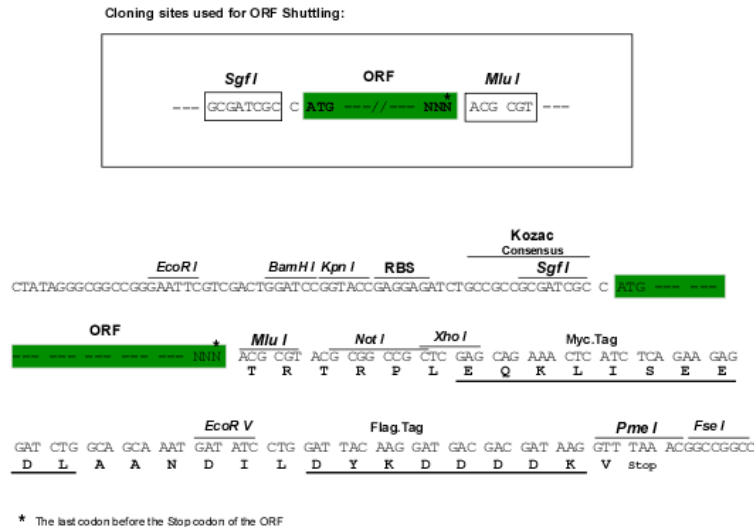
MKLNFSRLRVFNLCWDIPYLSKHRADRMKRLGDFLNLENFDLALLEEVWSEQDFQYLRQRLSLTYPDA
 HYFRSGMIGSGLCVFSKHPIQEIQHVYSLNGYPYMFHHGDWFCGKSVGLLVRLSGLVLNAYVTHLHAE
 YSRQKDIYFAHRVAQAWELAQFIHHTSKNADVLLCGDLNMHPKDLGCCLLKEWTGLHDAFVETEDFKGS
 DDGCTMPKNCYVSQDLGPFPSGIRIDYVLYKAVSEFHVCCETLKTITGCDPHSDKPFSDHEALMATLY
 VKHSPPQEDPCTACGPLERSDLISVLREARTEGLGLIAKARWAAAFSGYIVWGLSLLVLLCVLAAGEEA
 REVAIILCIPSVGLVLVAGAVYLFHKQEAKGLCRAQAEMLHVLTRTETQDRGSEPHLAYCLQQEGDRA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_009213

ORF Size: 1257 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_009213.2](#), [NP_033239.1](#)

RefSeq Size: 1621 bp

RefSeq ORF: 1260 bp

Locus ID: 20598

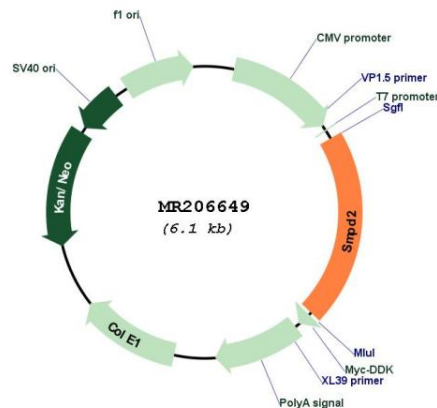
UniProt ID: [O70572](#)

Cytogenetics: 10 B1

MW: 47.5 kDa

Gene Summary: This gene encodes a protein with similarity to the human nSMase1 protein. In humans, the nSMase1 protein 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]

Product images:



Circular map for MR206649