

## Product datasheet for MR224852

### Sema6d (NM\_172537) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sema6d (NM_172537) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sema6d
Synonyms:	1110067B02Rik; AA409156; D330011G23; mKIAA1479
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR224852 representing NM_172537 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**

ATGGGGTTCTTCTGCTTTGGTTCTGCGTGCTGTTCCTTCTGGTCTCCAGGTTACGGGCGGTACAGTTCC  
CAGAAGACGATGAGCCCCTCAACACGGTTGACTATCACTATTCAAGGCAATATCCGGTTTTAGAGGACG  
CCCTTCAGGCAACGAATCGCAGCACAGGCTGGACTTTCAGCTGATGTTGAAAATTCGAGACACACTTTAT  
ATTGCTGGCAGGGATCAAGTCTATACAGTGAACCTAAATGAAATCCCCAAACAGAGGTGATACCAAGCA  
AGAAGCTGACGTGGAGGTCCAGACAGCAGGATCGAGAAAATTGTGCTATGAAAGGCAAGCATAAAGATGA  
ATGCCACAACCTCATCAAGTCTTTGTCCCAAGAAATGATGAGATGGTTTTGTCTGTGGTACCAATGCT  
TTCAACCCGATGTGCAGATACTATAGGTTGAGAACGTTAGAGTATGATGGGGAAGAAATTAGTGGCTGG  
CACGATGCCCCTTTGATGCCCGACAAACCAATGTCGCCCTCTTTGCTGATGGAAAACCTATTCTGCCAC  
AGTGGCTGATTTCTGGCCAGTGATGCTGTCAATTTACAGAAGCATGGGAGATGGATCTGCCCTTCGCACA  
ATAAAATACGATTCCAAGTGATCAAAGAACCACACTTCCTTCATGCCATAGAATATGAAAACCTATGTCT  
ATTTCTTCTTCAGAGAAATCGCCGTGGAACATAATAACTTAGGCAAGGCTGTGTATCCCGCGTGGCTCG  
CATTTGTAAAAACGACATGGGTGGCTCACAGCGGGTCTGGAGAAACACTGGACTTCCTTCCTTAAGGCT  
CGGCTGAACGTCTCCGTTCTGGAGATTCCTTTTCTACTTCGACGTCTGCAGTCTATAACAGACATAA  
TCCAAATCAATGGCATCCCCACTGTGGTTGGGGTCTTCACCACACAGCTCAACAGCATTCTGTTCTGC  
AGTCTGTGCCTTTAGCATGGACGACATTGAGAAAGTGTCAAAGGGCGGTTCAAAGAGCAGAAAAACCCCA  
GACTCTGTTTGGACAGCAGTTCCCGAAGACAAAGTACCAAAACCAAGGCCTGGCTGTTGTGCCAAACACG  
GCCTCGCAGAAGCTTACAAGACCTCCATCGACTTTCAGATGACACCCTGGCTTTCATCAAGTCCCACCC  
GCTGATGGACTCTGCCGTCCCACCCATTGCCGATGAGCCCTGGTTCACAAAGACACGGGTACAGGTACAGG  
TTGACAGCCATCGAAGTGGACCGTTCAGCAGGGCCATACCAAACTACACAGTCATCTTTGTTGGCTCTG  
AAGCTGGCGTGGTACTTAAAGTTTTGGCAAAGACAGTCCTTTCTCTGAATGACAGTGTATTACTCGA  
AGAGATTGAAGCTTATAACCCAGCCAAGTGCAGCGCCGAGAGTGAGGAGGACAGAAAGGTGGTCTCATT


[View online »](#)

CAGCTGGACAAGGATCACCATGCTTTATACGTGGCCTTCTAGCTGCGTGGTCCGCATCCCCCTCAGCC  
GCTGTGAGCGCTACGGATCGTGTAAAAAGTCTTGCAATGCATCACGTGACCCGTAAGTGTGTTAAG  
CCAGGGAGTTTGTGAGAGAGTGACCCATAGGATGCTGCTGTTAACCAGAACTTCTTTGCTTTCCATAAC  
CACAGCCCTGGAGGATATGAGCAGGACACGGAGTACGGCAACACAGCCACCTAGGGGACTGCCACGGTG  
TACGGTGGGAAGTCCAGTCTGGAGAATCCAATCAGATGGTCCACATGAATGTCCTCATCACCTGCGTGT  
TGCCGCTTTTGTCTTGGGCGCTTCATCGCAGGAGTGGCCGTGTACTGCTACCGTGACATGTTTCGTTCCG  
AAGAACAGAAAGATCCATAAAGACGCAGAATCCGCCAGTCTGTCACAGACTCCAGCGGAAGCTTCGCCA  
AGCTGAACGGCCTCTTTGACAGCCCGTCAAGGAATACCAGCAGAACATTGATTCTCCCAAACCTACAG  
CAACCTGCTGACCACTCGGAAGGAAGTCCACCAAAACACGGATACAAAGTCCATGGCCGTGGACCACAGA  
GGCCAGCCTCCCGAGCTGGCTGCTCTCCCAACGCGGAATCCACACCTGTCTCCACCAGAAGACCTGC  
AGGCCATGAAGAGCCACTCTGAGAAGGCCACAGCCACGGTGTCTCAAGGAAAGAACACCCCAAGTTTTT  
TCCTTCTAGTCTCCACCCATTCCCAATTGAGTACGGGCATATCCCAAGTCCATCGTTCTTCCAAAC  
GCCACTCAGACTACAATACATCCTTCTCCAATCGAATGCCACAAAGCCGAAAAGAAGCTTCAGAGCA  
TGGATCACCTCTTACGAAGTATCCAGTAAGCGGGAGCACCGGCGGTCTGTGGATTCCAGGAATACTCT  
CAATGATCTCCTGAAGCATCTAAATGACCAAAACAGTAACCCCAAAGCCATCCTGGAGAGATCCATATG  
GCTCATCAAACCTCATGCTGGACCCGGTGGGACCAATGGCTGAGGTCCACCCAAGGTCCCTAACCGGG  
AGGCATCTCTATACTCCCTCCCTCCCACTCCCAAGAAATAGTCCAACCAAGAGAGTAGATGTCCCCAC  
CACTCCTGGGGTGCCATGACTTCTCTGGAAGACAAAGGGTTATCACAAAAATTCCTCCAGAGGCAC  
TCTATATCTGCCGTGCCTAAAACTTAACTCACCAATGGTGTCTTGTATCTAGACAGCCGAGTATGA  
ACCGTGGAGGCTATATGCCACCCCAACAGGGGCGAAGGTGGACTATATTCAGGGGACACCGGTGAGTGT  
TCATCTGCAGCCCTCCCTCTCCAGACAGAGCAGCTATACCAGTAATGGCACCTCCCAAGGACGGGACTA  
AAGAGGACACCATCCTTAAACCTGATGTGCCACCAAGCCTTCTTTGTTCCGCAAAACCATCTGTCA  
GACCACTGAACAAGTACACGTAC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR224852 representing NM\_172537  
Red=Cloning site Green=Tags(s)

MGFLLWFVFLVLSRLRAVSFPEDEPLNTVDYHYSRQYPVFRGRPSGNESQHRDLDFQLMLKIRDLY  
IAGRDQVYTVNLNEIPQTEVIPSCKLTWRSRQQDRENCAMKGKHKDECHNFIKVFVPRNDEMVFVCGTNA  
FNPMCRYRLRLTEYDGEIISGLARCPFDARQTNVALFADGKLYSATVADFLASDAVIYRSMGDGSALRT  
IKYDSKWIKEPHFLHAIEYGNVYVFFREIAVEHNNLGKAVYSRVARICKNDMGGSQVRLEKHWTSFLKA  
RLNCSVPGDSFFYFDVLQSIDIIQINGIPTVVGFTTQLNSIPGSAVCAFSMDIEKVFGRFKEQKTP  
DSVWTAVPEDKVPKPRPGCCAKHGLAEAYKTSIDFPDDTLAFIKSHPLMDSAVPPIADEPWFTKTRVRYR  
LTAIEVDRSAGPYQNYTVIFVGSEAGVVLKVLAKTSPFSLNDSVLLIEIEAYNPAKCSAESEEDRKVVSL  
QLDKDHHALYVAFSSCVVRIPLSRCERYGSCCKSCIASRDPYCGWLSQGVCEVTLGMLLLTEDFFAFHN  
HSPGGYEQDTEYGNTAHLGDCHGVRWEVQSGESNQMVHNMVLTICVFAAFVLGAFIAGVAVYCYRDMFVR  
KNRKIHKDAESAQSCTDSSGSFAKLNLGFDSPVKEYQQNIDSPKLYSNLLTSRKELPPNTDTKSMVDHR  
GQPPLEALPTPESTPVLHQKTLQAMKSHSEKAHSHGASRKEHPQFFPSSPPPHSPLSHGHIPSAIVLPN  
ATHDYNTSFSNSNAHKAIEKQLQSMHPLTKSSSKREHRRSVDSRNTLNDLLKHLNDPNSNPAILGEIHM  
AHQTLMLDPVGPMAEVPPKVPNREASLYSPPSTLPRNSPTKRVDVPTTPGVPMTSLERQGYHKNSSQRH  
SISAVPKNLNSPNGVLLSRQPSMNRGGYMPPTTGAKVDYIQGTPVSVHLQPSLSRQSSYTSNGTLPRTGL  
KRTPSLKPDPVPPKPSFVPQTTSVRPLNKYTY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9030\\_e06.zip](https://cdn.origene.com/chromatograms/mm9030_e06.zip)

**Restriction Sites:**

Sgfl-MluI

## Cloning Scheme:



ACCN: NM\_172537

ORF Size: 3033 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\\_172537.4](#), [NP\\_766125.2](#)

RefSeq Size: 6335 bp

RefSeq ORF: 3036 bp

Locus ID: 214968

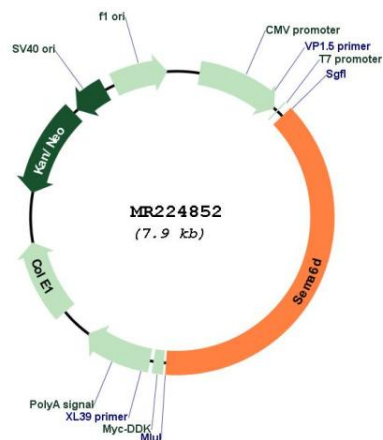
UniProt ID: Q76KF0

Cytogenetics: 2 F1

MW: 113.8 kDa

Gene Summary: Shows growth cone collapsing activity on dorsal root ganglion (DRG) neurons in vitro. May be a stop signal for the DRG neurons in their target areas, and possibly also for other neurons. May also be involved in the maintenance and remodeling of neuronal connections (By similarity).[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for MR224852