

Product datasheet for **RC216774**

SEMA6D (NM_153619) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | SEMA6D (NM_153619) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | SEMA6D |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RC216774 representing NM_153619
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAGGGTCTTCTGCTTTGTGCCTACATACTGCTGCTGATGGTTTCCCAGTTGAGGGCAGTCAGCTTTC
 CTGAAGATGATGAACCCCTTAATACTGTGACTATCACTATTCAGGCAATATCCGGTTTTAGAGGACG
 CCCTTCAGGCAATGAATCGCAGCACAGGCTGGACTTTCAGCTGATGTTGAAAATTCGAGACACACTTTAT
 ATTGCTGGCAGGGATCAAGTTTATACAGTAAACTTAAATGAAATGCCAAAAACAGAAGTAATACCCAACA
 AGAAACTGACATGGCGATCAAGACAACAGGATCGAGAAAAGTGTCTATGAAAGGCAAGCATAAAGATGA
 ATGCCACAACCTTATCAAAGTATTTGTTCCAAGAAACGATGAGATGGTTTTTGTGTGGTACCAATGCA
 TTCAATCCCATGTGTAGATACTACAGTTGAGTACCTTAGAATATGATGGGAAGAAATAGTGGCCTGG
 CAAGATGCCATTTGATGCCAGACAAACCAATGTTGCCCTTTTGTGCTGATGGGAAGCTGTATTCTGCCAC
 AGTGGCTGACTTCTGGCCAGCGATGCCGTTATTTATCGAAGCATGGGTGATGGATCTGCCCTTCGCACA
 ATAAAATATGATTCCAAATGGATAAAAGAGCCACACTTTCTTCATGCCATAGAATATGAAACTATGTCT
 ATTTCTTCTTTCGAGAAATCGTGTGCGAACATAATAATTTAGGCAAGGCTGTGTATTTCCCGCTGGCCCG
 CATATGTA AAAACGACATGGGTGGTTCCAGCGGGTCTGGAGAAACTGGACTTCATTCTAAAGGCT
 CGGCTGAACTGTTCTGTCCCTGGAGATTCGTTTTTCTACTTTGATGTTCTGCAGTCTATTACAGACATAA
 TACAAATCAATGGCATCCCCACTGTGGTCGGGGTGTACCACGCAGTCAATAGCATCCCTGGTTCTGC
 TGTCTGTGCATTTAGCATGGATGACATTGAAAAAGTATCAAAGGACGGTTAAGGAACAGAAAAGTCCA
 GATTCTGTTTGGCAGCAGTCCCGAAGACAAAGTCCAAAGCCAAGGCTGGCTGTTGTCAAAAACACG
 GCCTTGCCGAAGCTTATAAAACCTCCATCGATTTCCCGGATGAAACTCTGTCATTATCAAAATCTCATCC
 CCTGATGGACTCTGCCGTTCCACCCATTGCCGATGAGCCCTGGTTCACAAAGACTCGGGTCAGGTACAGA
 CTGACGGCCATCTCAGTGGACCATTAGCCGGACCCTACCAGAACTACACAGTCACTTTTGTGGCTCTG
 AAGCTGGCATGGTACTTAAAGTTCTGGCAAAGACCAGTCTTTCTCTTTGAAACGACAGCGTATTACTGGA
 AGAGATTGAAGCCTACAACCATGCAAAGTGCAGTGTGAGAATGAGGAAGACAAAAGGTCATCTCATT
 CAGTTGGATAAAGATCACACGCTTTATATGTGGCTTCTAGTGCATTATCCGCATCCCCCTCAGTC
 GCTGTGAGCGTTATGGATCATGTA AAAAGTCTTGTATTGCATCTCGTACCCGATTGTGGCTGGTTAAG
 CCAGGGATCCTGTGGTAGAGTGACCCAGGGATGCTTGTGAAGGATATGAACAAGACACAGAATTCGGC
 AACACAGTCTATAGGGGACTGCCATGACATGGAGGTATCTTCATCTTCTGTTACCACAATGGTGTACG
 ATGGGAAGTCCAGTCTGGAGAGTCCAACCATGGTCCACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216774 representing NM_153619
 Red=Cloning site Green=Tags(s)

MRVFLLCAYILLMVSQLRVAVSFPEDDEPLNTVDYHYSRQYPVFRGRPSGNEsqhRLDFQLMLKIRDLY
 IAGRDQVYTVNLEMPKTEVIPNKKLTWRSRQDRENCAMKGGKHKDECHNFIKVFPVPRNDEMVFVCGTNA
 FNPMCRYRLSTLEYDGEEISGLARCPFDARQTNVALFADGKLYSATVADFLASDAVIYRSMGDGSAALRT
 IKYDSKWIKEPHFLHAIEYGNVYVFFREIAVEHNNLKGAVYSRVARICKNDMGGSQRVLEKHWTSFLKA
 RLNCSVPGDSFFYFDVLQSIITDIIQINGIPTVVGFTTQLNSIPGSVAVCAFMSDDIEKVFKGRFKEQKTP
 DSVWTVAPEDKVPKPRPGCCAKHGLAEAYKTSIDFPDETLSEIKSHPLMDSAVPPIADEPWFTKTRVRYR
 LTAISVDHSAGPYQNYTVIFVGSEAGMVLKVLAKTSPFSLNDSVLLLEEIEAYNHAKCSAENEEDKKVISL
 QLDKDHHALYVAFSSCIIRIPLSRCERYGSCCKSCIASRDPYCGWLSQGSQGRVTPGMLAEGYEQDTEFG
 NTAHLGDCHDMEVSSSVTTMVYDGKSSLESPTRWST

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8069_a02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_153619

ORF Size: 1791 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_153619.1](#), [NP_705872.1](#)

RefSeq Size: 5919 bp

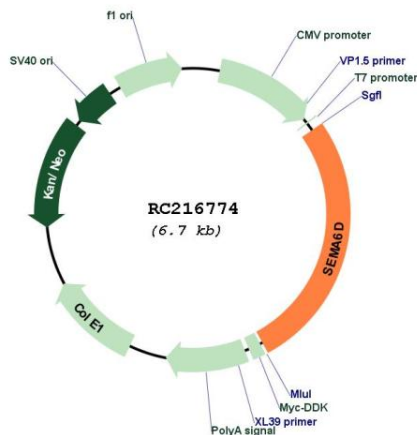
RefSeq ORF: 1794 bp

Locus ID: 80031

UniProt ID: [Q8NFY4](#)
Cytogenetics: 15q21.1
Domains: Sema
Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Axon guidance
MW: 65.1 kDa

Gene Summary: Semaphorins are a large family, including both secreted and membrane associated proteins, many of which have been implicated as inhibitors or chemorepellents in axon pathfinding, fasciculation and branching, and target selection. All semaphorins possess a semaphorin (Sema) domain and a PSI domain (found in plexins, semaphorins and integrins) in the N-terminal extracellular portion. Additional sequence motifs C-terminal to the semaphorin domain allow classification into distinct subfamilies. Results demonstrate that transmembrane semaphorins, like the secreted ones, can act as repulsive axon guidance cues. This gene encodes a class 6 vertebrate transmembrane semaphorin that demonstrates alternative splicing. Several transcript variants have been identified and expression of the distinct encoded isoforms is thought to be regulated in a tissue- and development-dependent manner. [provided by RefSeq, Nov 2010]

Product images:



Circular map for RC216774