

## Product datasheet for **SC124439**

### SEMA6D (NM\_153617) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SEMA6D (NM_153617) Human Untagged Clone
Tag:	Tag Free
Symbol:	SEMA6D
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None



[View online »](#)

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_153617, the custom clone sequence may differ by one or more nucleotides

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ATGAGGGTCTTCCTGCTTTGTGCCTACATACTGCTGCTGATGGTTTCCCAGTTGAGGGCAGTCAGCTTTC
CTGAAGATGATGAACCCCTTAATACTGTGCGACTATCACTATTCAAGGCAATATCCGGTTTTAGAGGACG
CCCTTCAGGCAATGAATCGCAGCACAGGCTGGACTTTCAGCTGATGTTGAAAATTCGAGACACACTTTAT
ATTGCTGGCAGGGATCAAGTTTATACAGTAAACTTAAATGAAATGCCAAAACAGAAGTAATACCCAACA
AGAAACTGACATGGCGATCAAGACAACAGGATCGAGAAAAGTGTCTATGAAAGGCAAGCATAAAGATGA
ATGCCACAACCTTATCAAAGTATTTGTTCCAAGAAACGATGAGATGGTTTTGTTTGTGGTACCAATGCA
TTCAATCCCATGTGTAGATACTACAGGTTGAGTACCTTAGAATATGATGGGGAAGAAATAGTGGCCTGG
CAAGATGCCCATTTGATGCCAGACAAACCAATGTTGCCCTCTTTGCTGATGGGAAGCTGTATTCTGCCAC
AGTGGCTGACTTCTGGCCAGCGATGCCGTTATTTATCGAAGCATGGGTGATGGATCTGCCCTTCGCACA
ATAAAATATGATCCAAATGGATAAAAGAGCCACACTTCTTCATGCCATAGAATATGAAAATATGTCT
ATTTCTTCTTTGAGAAAATCGTGTCGAACATAATAATTTAGGCAAGGCTGTGTATCCCGCGTGGCCCG
CATATGAAAAACGACATGGGTGGTCCAGCGGGTCTGGAGAAAACACTGGACTTCATTTCTAAAGGCT
CGGCTGAACTGTTCTGTCCCTGGAGATTCGTTTTCTACTTTGATGTTCTGCAGTCTATTACAGACATAA
TACAAATCAATGGCATCCCCACTGTGGTCGGGGTGTACCACGCAGCTCAATAGCATCCCTGGTTCTGC
TGTCTGTGCATTTAGCATGGATGACATTGAAAAAGTATCAAAGGACGGTTAAGGAACAGAAAACCTCCA
GATTCTGTTTGGACAGCAGTTCGGAAGACAAAGTCCAAAGCCAAGGCTGGCTGTTGTGCAAAACACG
GCCTTGCCGAAGCTTATAAAACCTCCATCGATTTCCCGGATGAACTCTGTCATTCATCAAACTCATCC
CCTGATGGACTCTGCCGTTCCACCCATTGCCGATGAGCCCTGGTTCACAAAGACTCGGGTACAGTACAGA
CTGACGGCCATCTCAGTGGACCATTCAGCCGGACCCCTACCAGAACTACACAGTCACTTTTGGCTCTG
AAGCTGGCATGGTACTTAAAGTTCTGGCAAAGACCAAGTCCCTTTCTTTGAAACGACAGCGTATTACTGGA
AGAGATTGAAGCCTACAACCATGCAAAGTGCAGTGTGAGAATGAGGAAGACAAAAGGTCATCTCATT
CAGTTGGATAAAGATCACCACGCTTTATATGTGGCGTTCTCTAGCTGCATTATCCGCATCCCCCTCAGTC
GCTGTGAGCGTTATGGATCATGTAAAAAGTCTTGTATTGCATCTCGTGACCCGATTGTGGCTGGTTAAG
CCAGGGATCCTGTGGTAGAGTGACCCAGGGATGCTTGTGAAGGATATGAACAAGACACAGAATTCGGC
AACACAGCTCATAGGGGACTGCCATGAAATTTGCCTACTTCAACTACACCAGATTACAAAATATTTG
GCGGTCCAACATCTGGTGTACGATGGGAAGTCCAGTCTGGAGAGTCCAACCAGATGGTCCACATGAATGT
CCTCATCACTGTCTTTGCTGCTTTTGTGGGGCATTGATGCAGGTGTGGCAGTACTGCTAT
CGAGACATGTTTGTTCGAAAAACAGAAAGATCCATAAAGATGCAGAGTCCGCCAGTATGCACAGACT
CCAGTGGAAAGTTTTGCCAAACTGAATGGTCTCTTTGACAGCCCTGTCAAGGAATACCAACAGAATATTGA
TTCTCCTAAACTGTATAGTAACCTGCTAACCAGTCCGAAAAGAGCTACCACCAATGGAGATACTAAATCC
ATGGTAATGGACCATCGAGGGCAACCTCCAGAGTTGGCTGCTCTTCTACTCCTGAGTCTACACCCGTGC
TTCACCAGAAGACCCTGCAGGCCATGAAGAGCCACTCAGAAAAGGCCATGGCCATGGAGCTTCAAGGAA
AGAAACCCCTCAGTTTTTCCGTCTAGTCCGCCACCTATTCCCATTAAAGTCAATGGGCATATCCCAGT
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AAAAGAAGCTTCAAACATTGATCACCTCTCACAAAGTCAATCCAGTAAGAGAGATCACCCGCGTTCTGT
TGATTCCAGAAATACCCTCAATGATCTCCTGAAGCATCTGAATGACCCAAATAGTAACCCAAAGCCATC
ATGGGAGACATCCAGATGGCACACCAGAACTAATGCTGGATCCCATGGGATCGATGTCTGAGGTCCCAC
CTAAAGTCCCTAACCAGGAGGCATCGCTATACTCCCTCCTTCAACTCTCCCAGAAATAGCCCAACCAA
GCGAGTGGATGTCCCACCCTCTGGAGTCCCAATGACTTCTCTGAAAAGACAAAGAGTTATCACAAA
AATTCTCCAGAGGCACTCTATATCTGCTATGCCTAAAACTTAAACTACCAAAATGGTGTGTTTGTAT
CCAGACAGCCTAGTATGAACCGTGGAGGATATATGCCACCCCACTGGGGCGAAGGTGGACTATATTCA
GGGAACACCAGTGAAGTTCATCTGCAGCCTTCCCTCTCCAGACAGAGCAGCTACACCAGTAATGGCACT
CTTCTAGGACGGGACTAAAGAGGACGCGTCCCTTAAACCTGACGTGCCACCAAAGCCTCCTTTGTTCC
CTCAAACCCATCTGTCAGACCACTGAACAAATACACATACTAG
```

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_153617 unedited  
TATACGACTCACTATAGGGCGGCCGCGATTTCGGCACGAGGCTGACTTCACCTTGCCCCA  
CCATGAGGGTCTTCTGCTTTGTGCCTACATACTGCTGCTGATGGTTTCCCAGTTGAGGG  
CAGTCAGCTTTCCCTGAAGATGATGAACCCCTTAATACTGTGACTATCACTATTCAGGC  
AATATCCGGTTTTAGAGGACGCCCTTCAGGCAATGAATCGCAGCACAGGCTGGACTTTC  
AGCTGATGTTGAAAATTCGAGACACACTTATATTGCTGGCAGGGATCAAGTTTATACAG  
TAAACTTAAATGAAATGCCCAAAACAGAAGTAATACCAAACAAGAACTGACATGGCGAT  
CAAGACAACAGGATCGAGAAAACCTGTGCTATGAAAGGCAAGCATAAAGATGAATGCCACA  
ACTTTATCAAAGTATTTGTTCCAAGAAACGATGAGATGGTTTTGTTTGTGGTACCAATG  
CATTCAATCCCATGTGTAGATACTACAGTTGAGTACCTTAGAATATGATGGGGAAGAAA  
TTAGTGGCCTGGCAAGATGCCCATTTGATGCCAGACAAACCAATGTTGCCCTCTTTGCTG  
ATGGGAAGCTGTATTCTGCCACAGTGGCTGACTTCTTGGCCAGCGATGCCCGTATTTATC  
GAAGCATGGGTGATGGATTCTGCCCTTTCGCACAATAAAATATGATTCCAAATGGATAAA  
AGAGCCCACACTTTTCTCATGCCATAGAATATGGGANACTATGTCTATTTTTCTCTTT  
CGAGAAAATCGCTGGTCAACATTATAATNTAAGGCAGGGCTGGGTATTCTCCCGGGTGG  
CCCGCATATGTA AACGACACTGGGTGGGTCCACCCGGGTCTGGAGAACA ACTGACTT  
CATTCTTAAGGCTCGCCTGACCCTTCTGCTGAGAATACGTTCTTCTTTGAGAGAGG  
GCCCA

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_153617 unedited  
ACACATTGGCGATTGGCAACCTTCCAGGNCCAGGGTGAGAGCACTGGAGGCAGGGGTAC  
ACAGNGCATGCCACTCCGGGCATCTGTTCAAGAAAACAGCTATGACCGGCCCGCAATC  
TAGAGTCGAGTTTTTTTTTTTTTTTTTAAATGATTTGTATATTTTATTTGACTTTACAT  
GCGGTGTTAAAAACCAAAGTACATATTTTACACATCCACAATACAAGTTTACAAGGT  
ATCTATTCATGTTAAAGTACTCTATAAAACAGTATAGAGACACTTCACTTGAGGGTTACT  
TTTTATGCCGTACCATTA AAAAAGATACAATCTGCGTTTACCTTTCACAAAATGGATAAA  
GCATTTAAAAATTAATAACAGGATAGAGACTAGATTTAATGTTAGAAATTTCAACATA  
AATACTGATTGAACTCACATTACAACTACAAGGAAGCACAATGTTACAAAATGTTATCT  
GGGTCACATAGAGTTACTGTTCTGTTTACACACGCTGGGATTAATATTGGTAAGGTGA  
ATTCAAACACGTTTGTGTTGGTGGACTGAGTAGTGTATCATTGGTTGGTTAAATTTA  
ATAATAAAGTGAATATTTTANTTGGCAAGCTGAAGTGTTC AAGAACAGAAATTTTAGC  
TTTAGCGCTCCCAAAGATCACTGAAAATCACGTTCTTAATAAAAAATGTTTCTTAAAA  
AAAAAAAAAACTGGGATCAGNTTCCCCATTACTGTAAAAAATGATCTTGGTCTCNGC  
AANATGTCCCCCCCCAAATNNTAGGTCCCACCGGATTAGCCAAAGAAAACCATTTGAA  
ACNCATTTACCTGATTACAGCANNNGGCAAAACCCNGCGTGGGAATTTACAAGAATGGTT  
ACCCAAAAAGTGAAGTGGAGGACANNNAATTNACTGAAAATGNNAAGTTCAAACAAT  
T

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_153617

**Insert Size:**

6000 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_153617.1](#), [NP\\_705870.1](#)

**RefSeq Size:** 5941 bp

**RefSeq ORF:** 3054 bp

**Locus ID:** 80031

**UniProt ID:** [Q8NFX4](#)

**Cytogenetics:** 15q21.1

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Axon guidance

**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]  
Transcript Variant: This variant (3) lacks an internal exon, compared to variant 4. The encoded isoform (3) is missing an internal segment relative to isoform 4.