

## **Product datasheet for SC313647**

## SEMA6D (NM\_024966) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: SEMA6D (NM\_024966) Human Untagged Clone

Tag: Tag Free
Symbol: SEMA6D
Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC313647 representing NM\_024966.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGAGGGTCTTCCTGCTTTGTGCCTACATACTGCTGATGGTTTCCCAGTTGAGGGCAGTCAGCTTT CCTGAAGATGATGAACCCCTTAATACTGTCGACTATCACTATTCAAGGCAATATCCGGTTTTTAGAGGA CGCCCTTCAGGCAATGAATCGCAGCACAGGCTGGACTTTCAGCTGATGTTGAAAATTCGAGACACACTT TATATTGCTGGCAGGGATCAAGTTTATACAGTAAACTTAAATGAAATGCCCAAAACAGAAGTAATACCC AACAAGAAACTGACATGGCGATCAAGACAACAGGATCGAGAAAACTGTGCTATGAAAGGCAAGCATAAA AATGCATTCAATCCCATGTGTAGATACTACAGGTTGAGTACCTTAGAATATGATGGGGAAGAAATTAGT GGCCTGGCAAGATGCCCATTTGATGCCAGACAAACCAATGTTGCCCTCTTTGCTGATGGGAAGCTGTAT CTTCGCACAATAAAATATGATTCCAAATGGATAAAAGAGCCACACTTTCTTCATGCCATAGAATATGGA AACTATGTCTATTTCTTCTTCGAGAAATCGCTGTCGAACATAATAATTTAGGCAAGGCTGTGTATTCC CGCGTGGCCCGCATATGTAAAAACGACATGGGTGGTTCCCAGCGGGTCCTGGAGAAACACTGGACTTCA TTTCTAAAGGCTCGGCTGAACTGTTCTGTCCCTGGAGATTCGTTTTTCTACTTTGATGTTCTGCAGTCT ATTACAGACATAATACAAATCAATGGCATCCCCACTGTGGTCGGGGTGTTTACCACGCAGCTCAATAGC ATCCCTGGTTCTGCTGTCTGTGCATTTAGCATGGATGACATTGAAAAAGTATTCAAAGGACGGTTTAAG GAACAGAAAACTCCAGATTCTGTTTGGACAGCAGTTCCCGAAGACAAAGTGCCAAAGCCAAGGCCTGGC TGTTGTGCAAAACACGGCCTTGCCGAAGCTTATAAAACCTCCATCGATTTCCCGGATGAAACTCTGTCA TTCATCAAATCTCATCCCCTGATGGACTCTGCCGTTCCACCCATTGCCGATGAGCCCTGGTTCACAAAG ACTCGGGTCAGGTACAGACTGACGGCCATCTCAGTGGACCATTCAGCCGGACCCTACCAGAACTACACA GTCATCTTTGTTGGCTCTGAAGCTGGCATGGTACTTAAAGTTCTGGCAAAGACCAGTCCTTTCTCTTTG AACGACAGCGTATTACTGGAAGAGATTGAAGCCTACAACCATGCAAAG<mark>TAG</mark>

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC



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## SEMA6D (NM\_024966) Human Untagged Clone - SC313647

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_024966

**Insert Size:** 1431 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customercom">customercom</a> or by

calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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:** <u>NM 024966.2</u>

 RefSeq Size:
 2290 bp

 RefSeq ORF:
 1431 bp

 Locus ID:
 80031

 UniProt ID:
 Q8NFY4

 Cytogenetics:
 15q21.1

 Domains:
 Sema

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Axon guidance

MW: 54.2 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]

Transcript Variant: This variant (6) represents the shortest transcript and encodes the shortest isoform (6). Lacking a PSI domain and a predicted transmembrane domain, isoform 6 is considered a putative secreted protein.