

Product datasheet for **SC314657**

Semaphorin 3A (SEMA3A) (NM_006080) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Semaphorin 3A (SEMA3A) (NM_006080) Human Untagged Clone
Tag:	Tag Free
Symbol:	Semaphorin 3A
Synonyms:	coll-1; COLL1; HH16; Hsema-I; Hsema-III; SEMA1; SEMAD; SEMAIII; SEMAL; SemD
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_006080 edited
GGTCTTGATTGTCTGCATTTATGAATGAACTGACCTAAATCACCTGTTACCTCCAGTTT
CCAGATTGTTTGAACCTTCTCTGGCCGACAATACAGGAAGGAAGACTAAAGCAGCAAAGG
GACCTACAGCGTCTGCAGCATGGGCTGGTTAACTAGGATTGTCTGTCTTTTCTGGGGAGT
ATTACTTACAGCAAGAGCAAATATCAGAATGGGAAGAACAATGTCCAAGGCTGAAATT
ATCCTACAAGAAATGTTGGAATCCAACAATGTGATCACTTTCAATGGCTTGGCCAAACAG
CTCCAGTTATCATACCTTCTTTGGATGAGGAACGGAGTAGGCTGTATGTTGGAGCAA
GGATCACATATTTTCATTCGACCTGGTTAATATCAAGGATTTTCAAAGATTGTGTGGCC
AGTATCTTACACCAGAAGAGATGAATGCAAGTGGGCTGGAAAAGACATCCTGAAAGAATG
TGCTAATTTTCATCAAGGTAATTAAGGCATATAATCAGACTCACTTGTACGCCTGTGGAAC
GGGGCTTTTCATCCAATTTGCACCTACATTGAAATTGGACATCATCCTGAGGACAATAT
TTTTAAGCTGGAGAACTCACATTTTAAAACGGCCGTGGGAAGAGTCCATATGACCCTAA
GCTGCTGACAGCATCCCTTTAATAGATGGAGAATTATACTCTGGAACCTGCAGCTGATTT
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TTTCAAGGGATCAGCCGTGTGTATGTATAGCATGAGTGTGAGAAGGGTGTTCCTTGG
TCCATATGCCACAGGGATGGACCCAATCAATGGGTGCCTTATCAAGGAAGAGTCCC
CTATCCACGGCCAGGAACCTGTCCAGCAAAACATTTGGTGGTTTTGACTCTACAAGGA
CCTTCTGATGATGTTATAACCTTTGCAAGAAGTCATCCAGCCATGTACAATCCAGTGTT
TCCTATGAACAATCGCCCAATAGTGATCAAACGGATGTAATTTACAAATTTACACAAT
TGTCGTAGACCGAGTGGATGCAGAAGATGGACAGTATGATGTTATGTTTATCGGAACAGA
TGTTGGGACCGTCTTAAAGTAGTTTCAATTCCTAAGGAGACTTGGTATGATTTAGAAGA



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GGTTCTGCTGGAAGAAATGACAGTTTTTCGGGAACCGACTGCTATTTTCAGCAATGGAGCT
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ACACCGGTGTGATATTTACGGGAAAGCGTGTGCTGAGTGTGCCTCGCCGAGACCCCTTA
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AATGTCATTTGCCATATTGCCATCTAAAGGAGAAAAACTGCATCAGCAAAGCCATTGTAT
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TGTTGGATTCAAGGATATATTTTGTCTACTGGCCCTCATGTTTGTATGTAATTGAGGAG
TAAAATGAGTAAAATGATACTGAATGAAATGTTCTGTGGAAATATTAATAAAAAAAAAAAAA
: CATAAGCCATCCATCATCCAGAAGAAAAATGGAATACACTGATCTACTACTGATGTCTT
CTTTCAGCTTTGATCTAAAGATGTATTTTATTAATAACTATAATTTAAATGTACCATGAAA
AATATGCAGTAAAAATTAGTTGTTTTCTAAGCTAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAA
    
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Restriction Sites:

NotI-NotI

ACCN:

NM_006080

Insert Size:

3300 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 custsupport@origene.com 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:

The ORF of this clone has been fully sequenced and found to be a perfect match to NM_006080.1.

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:	<ol style="list-style-type: none">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_006080.1</u> , <u>NP_006071.1</u>
RefSeq Size:	2530 bp
RefSeq ORF:	2316 bp
Locus ID:	10371
UniProt ID:	<u>Q14563</u>
Cytogenetics:	7q21.11
Domains:	Sema, ig, IG, PSI
Protein Families:	Secreted Protein
Protein Pathways:	Axon guidance
Gene Summary:	<p>This gene is a member of the semaphorin family and encodes a protein with an Ig-like C2-type (immunoglobulin-like) domain, a PSI domain and a Sema domain. This secreted protein can function as either a chemorepulsive agent, inhibiting axonal outgrowth, or as a chemoattractive agent, stimulating the growth of apical dendrites. In both cases, the protein is vital for normal neuronal pattern development. Increased expression of this protein is associated with schizophrenia and is seen in a variety of human tumor cell lines. Also, aberrant release of this protein is associated with the progression of Alzheimer's disease. [provided by RefSeq, Jul 2008]</p>