

Product datasheet for **SC303407**

Semaphorin 5A (SEMA5A) (NM_003966) Human Untagged Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Semaphorin 5A (SEMA5A) (NM_003966) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Semaphorin 5A |
| Synonyms: | SEMAF; semF |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Fully Sequenced ORF: | >SC303407 representing NM_003966. Blue=Insert sequence Red=Cloning site Green=Tag(s) |

```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGAAGGGAACCTGTGTTATAGCATGGCTGTTCTCAAGCCTGGGGCTGTGGAGACTCGCCACCCAGAG
GCCAGGGTACGACTCAGTGCCAGAGAACCAGCATCCAGTCATCTCCTATAAAGAAATTGGCCCTGG
TTACGGGAGTTCAGAGCGAAGAATGCTGTGGATTTCTCGCAGTTAACATTTGACCCAGGACAGAAAGAA
CTTGTGTAGGAGCAAGAACTACCTCTCAGGTTACAGCTTGAGGATCTGTCTCTATCCAGGCTGTG
GAATGGGAGTGTGATGAAGCTACCAAAAAGGCCTGTTACAGCAAAGGCAAATCAAAGGAGGAATGTCAG
AACTACATCCGGGTGCTTCTGGTGGGTGGCGACCGTTATTCACCTGTGGGACCAATGCATTACGCCT
GTCTGCACCAACCGCTCGTTGAGCAACCTGACTGAGATCCATGATCAGATCAGTGGCATGGCCCGCTGT
CCCTACAGTCCCCAGCACAATTCACAGCGCTCCTCACAGCTGGTGGGGAGCTCTATGCTGCTACAGCC
ATGGATTTTCCAGGACGTGATCCTGCCATTTACCGAAGCCTAGGCATTTTACCTCCTCTCCGCACGGCG
CAGTACAACCTCCAAATGGCTCAATGAGCCAAACTTTGTGTCATCTTATGACATCGGAAATTTTACCTAC
TTCTTTTCCGAGAAAATGCAGTAGAGCATGACTGTGGGAAAACAGTGTCTCCAGAGCTGCCGGGTG
TGCAAGAACGATATTGGTGGGCGCTTCTGTGGAAGACACCTGGACCACATTCATGAAGGCTCGCCTG
AACTGCTCCCGTCTGGGAAGTCCCCTTTTACTACAACGAATTGCAGAGTACTTTCTTCTGCCTGAG
CTGGATTTGATCTATGGCATCTTTACCACCAATGTGAACAGCATTGCGGCCTCAGCTGTGCTGCTTC
AACCTGAGCGCCATCGCGCAGGCCTTCTCTGGGCCCTTCAAGTACCAAGAAAACCTCGCGCTCGGCCTGG
CTACCGTATCCCAACCCAAACCCCACTTCCAGTGTGGCACCGTGGACCAGGGCCTGTACGTGAACCTG
ACCGAGAGAAATCTGCAGGATGCTCAGAAGTTCATTCTGATGCATGAGGTGGTACAGCCAGTGACCACA
GTGCCCTCCTTATGGAGGACAAATAGCCGCTTTTCCACGTGGCAGTCGACGTGGTGCAGGGCAGAGAA
GCGCTCGTCCACATCATCTATTTGGCCACAGATTACGGAACCATTAAGAAAGTGCGGTACCCCTGAAT
CAGACCTAAGCAGCTGTTTGTGGAAGAGATTGAGCTCTTCCCTGAGAGGCGGAGGGAGCCCATCAGG
AGCCTGCAGATCCTGCACAGCCAGAGTGTCTGTTCTGTTGGCCTGCGGGAGCACGTGGTCAAGATCCCC
CTGAAGAGGTGCCAGTTCTACCGCACACGCAGCACCTGCATTGGGGCCAGGACCCTTACTGTGGCTGG
```



```

GATGTGGTAAATGAAGAAATGCACAAGCCTGGAGGAGAGCCTGAGCATGACGCAGTGGGAACAGAGCATC
TCTGCGTGTCCGACCAGGAATCTCACCGTGGATGGGCACTTTGGTGTGTGGTCTCCGTGGACGCCTTGC
ACGCACACAGATGGCAGCGCCGTGGGATCTGCCTCTGTGCAACCCGCTCCTGCGACAGCCCGGCCCG
CAGTGTGGTGGCTGGCAGTGGCAGGGCCCTGGCATGGAGATCGCCAACCTGTTCCAGGAACGGAGGCTGG
ACTCCCTGGACCTCGTGGTCTCCCTGCAGCACTACCTGTGGGATCGGCTTCCAGGTGCGGCAGCGCTCC
TGCAGCAACCCCACTCCCAGGCACGGGGCCGGGTGTGCGTGGGACAGAACCAGGAGGAAAGATACTGC
AATGAACATTTGCTATGTCCCCCACACATGTTCTGGACAGGCTGGGGTCTTTGGGAACGGTGCACAGCC
CAATGCGGGGGTGGCATTCAAGCTCGCCGAGGATCTGTGAGAATGGGCCTGACTGTGCAGGCTGCAAT
GTGGAGTACCAGTCTTGAACACCAACCCGTGTCTGAGCTGAAGAAGACCACGCCTGGACACCCTGG
ACACCTGTCAACATCTCTGACAACGGCGGCCACTATGAGCAACGATTCCGATACACATGCAAAGCCCGC
CTGGCTGATCCGAATTTGCTGGAAGTGGGAAGACAGAGAATCGAAATGCGGTACTGTTCTAGCGACGGC
ACCAGTGGCTGCTCCACAGATGGGCTTTCTGGGGATTTCTGCGTGTGGGAGATACTCTGCCACACG
GTCAACGGGGCTTGGTACGCTGGACGTCTGGTACAGTGCAGCCGTGACTGCAGCAGGGGCATTCCG
AACCGGAAGCGTGTGCAACAACCCGAACCAAGTATGGGGGAATGCCTTGCCTTGGCCATCTCTG
GAATACCAGGAATGCAACATTTTCCCTGCCAGTGGATGGCGTGTGGTCTTGTGGTCCCCTGGACA
AAATGTTCAAGCAACATGCGGGCGGTGGACACTATATGAGGACCCGCTTGTCTCAATCCAGCCCGGCC
TATGGAGGGGACATCTGCCTGGGGCTGCACACAGAAGAGGCACTCTGCAACACGCAGCCCTGCCAGAG
AGCTGGTCCGAGTGGTCCGACTGGTCTGAGTGTGAAGCCTCTGGCGTCCAAGTCCGCGCCCGCCAGTGC
ATCCTCTGTTCCTATGGGCAGCCAGTCTCCGGGAACACCACGGAGAGCCGGCCGTGTGTGTTTAC
TCTAATTTTATCCAGAAGTATCTGTGGCAAGTCCAGTAGCGTAGAAGAGAAAAGGTGTGGAGAGTTC
AACATGTTCCACATGATCGCCGTGGGGCTGAGCAGCTCCATCCTCGGCTGCCTCCTACCCTGCTCGTC
TATACTTACTGCCAGCGGTACCAGCAGCAATCCCACGATGCGACTGTCCACCCCGTCTCACCTGCC
CCCCTTAATACCAGCATAACCAACCACATCAACAACTGGACAAGTACGACTCGGTGGAGGCCATCAAG
GCATTTAACAAAAACAACCTTGATCCTAGAGGAAAGAAACAATACTTCAACCCACATCTCACTGGGAAG
ACCTATTCTAATGCCTACTTTACAGATCTCAATAATTATGATGAGTACTAA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
    
```

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_003966
- Insert Size:** 3225 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).
- 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: [NM_003966.1](#)

RefSeq Size: 11825 bp

RefSeq ORF: 3225 bp

Locus ID: 9037

UniProt ID: [Q13591](#)

Cytogenetics: 5p15.31

Protein Families: Transmembrane

Protein Pathways: Axon guidance

MW: 120.6 kDa

Gene Summary: This gene belongs to the semaphorin gene family that encodes membrane proteins containing a semaphorin domain and several thrombospondin type-1 repeats. Members of this family are involved in axonal guidance during neural development. This gene has been implicated as an autism susceptibility gene.[provided by RefSeq, Jan 2010]