

Product datasheet for **SC102888**

Semaphorin 3E (SEMA3E) (AK021753) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Semaphorin 3E (SEMA3E) (AK021753) Human Untagged Clone
Tag:	Tag Free
Symbol:	Semaphorin 3E
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for AK021753, the custom clone sequence may differ by one or more nucleotides

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ATAAATTAACCTTTATCATGGGTATGTATATAGGAAAAATAATAGTTTGTATAAGGTTCGAATAGTTTG
TATAAGGTTCCGTAATCCACAGTTTCAGGCATACACCGGGGCTTGGAACATATCCCCTCAGATAA
GAGAGAATTCCTGTGTATGGAAGAGACTCCTCAGATACAGCTTCTCTCAACTGTAACCTATGAATTAA
AAAAAAGTTATTGGTCTATCCACCCCGCACATACAACCTACATTGTTATGGCAAGGATACGATGTCAC
ATGAATTGACTAAGTTTACAAGAGAGAAATTGAAGGCATGTAGCAATCCCATGGCAGTTGTGAAATCCA
TCTGCCTATATGTCACCAATTCGCCAATTCCAGGGGTAGGGAACATTTGATTAGTCTACTTTGGTTCTC
TGAAGTTGGCTCCCTTTCTTTTCTCAGTTCTTGACTTTTTCTTTGAGCTGTCTTTCTTTTCCATGA
GAAATGTCCTCTTTTGTAGCTTCTCAGCCTGCTTCTAGGCTCTGTCCCACTGGCACAGTTATCCACA
CTGGCACAACTCTTTAAAAAGCTTTGTGGACTTCAAATTATAAACCCTCACTCCACCAGAGAGAAGC
CACACCACAAAATTTCTCAAGAAGTCTCTATGTACTTTGAATGTCAATCAGGGAAATGATACCCTTAG
AGTCATATATGTCTTTTGTCTACCTGAGAGCGTCAGCTAGACACTGGCTTAAATCTTTCTGAAGTACAGG
TGGTCGTCACCTTATGATGGTTCAACTTGAATCTTTTACTTTTAGGATGGTATGAAAGCTATATGCATT
CAGTAGCAACCATACTTCAAGTACCCATACAACCATTCTATTTTTTACATTCAAGTACAGTATTCAAGTAA
TCATGAAATATTCAGCACTTCAATATAAAATAGGCTTTGTGTTAGATTACTTTGTTCAATATAACATAAT
GCAAGTGTTCGAGCACATTTAAGCAATGACGGGTTAAGCTGTGTATGGTAGGTTACGTGTACTATT
CAACTTAATATTTTTCAGCTTACGATGGGTTTGTGAGGACATAACCCCATTTGAAGTACAGGAGCATCTGT
AGTAGTAAACAAGTTGTATTGCATGTGCTTTATTTTATCTTGATCCTCAGACCATAATCTTACAGTTAAC
ACCCTGGATTTTTTTTTTTTAACTTCAGAACCTTTTGTGGAAGAAGCTGGAACGAGAAAGTTTTATTT
TGTAACCCTGCAAGTCCAGGTTGAAAGTATTTTCTCTAAATCTGCTTGAACCTGAGCAGTTCCCTTGT
TTAGTTCTTCTCTTTTTAATACCTTTCTACAGGTGTTTTTTGAAAAATTGCTTATCACTTTCAGCATT
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TCTTAAGTTTCTGTCATGGCAATGCCCTGTTAAATACCAAACTATTTTCAAGTATCTTTTTCTGCCTA
ACAAATCACCCAAAATTTACTACCTTAAAACAAAATTTCTTTGCTTGAGATTCTACTGTCTGAACTG
GACTCAGCTGGGCATTTCTTCTGGTCTCACCTGGAGTCATTTATGCAACTGCAGACATGTGGGACTCCA
CCAAAGATGGCTTTACTCAAATGTCTGGGGCTCAACTGGGGTGGCTGCATTAGCTCTGGCACAGCTGCA
GTTCCCTCTCCAGCAGGGTCTGGGCCATTTACATGATGACTGAGGGCTCCAAGAGGGTAAAAGCAGGA
GCATCTGGGCTAGGCCTTTAGAGCCTGTGCATAAACTGAAACAGCACTACTTCATCCATGCTGCCTTT
CAAAGCAAGTCCCGGGCCTGCTCAAAATTACAGGCAGGAAAAATACCTCTACCTGATGGTAGTGACAA
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GCAGGAGAATGGCGTGAACCCGGAAGCGGAGCTTGCAGTGAGCCGAGATTGCGCCACTGCAGTCCGAG
TCCGGCCTGGGCGACAGAGCGAAACTCCGCTC
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5' Read Nucleotide Sequence:

>OriGene 5' read for AK021753 unedited
 TTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGATCTGCCTGGCTTC
 TCAAAGCCTAGAACTCATAGAGCATCATTTCAACTGCATTCTTGTGGTCAGAGCCAGT
 CATCACAAGCCAGCTGAGATTCAGGAAACAGATAGAATTCACCTTCTTGATAAGACAT
 GGGTGAAGAGGAGGGCAGATAGAATTTAGGGCATCTCTCATTTGCCTGAGTCTTCTAC
 TGGTCCACATTGCTTAAATTCCTCCGACATGCAAAATGACACCCACCCCAAGAACCCAC
 AGTCCCACCAATTATGGCATCAGGCTCAGAGTCTACTTGTGTACAGTAGTTCCTCCCTCA
 ACTGTGGTTTTCGCTTCCACAGTTTTAGTTACCCACAGTCAACTGAGGTTCAAAAATAG
 ATGAGTACAGTATTAATAAGACATTTTGGGTAGAGAAAGATGCAGACCACATCCACACA
 ACTTCTATTACAGTGTATTATTTAATTGTTCTGTTTTATTATTATTAATCTTACTGT
 GTCTAATTTATAAATTAACCTTTATCATGGGTATGTATATAGGAAAAAATAATAGTTTGT
 ATAAGTTTGAATAGTTTGTATAAGTTTCGGTACTATCCACAGTTTCAGGCATACACCGG
 GGGTCTTGAACATATCCCTCAGATAAGAGAGAATTCCTGTGTATGGAAGAGACTCCT
 CAGATACAGTCTCTTCAACTGTAACCTATGAATTAAGGAAAGTTATTGGTCTATC
 CACCCCGCACATACAACCTACATTGTTATGGNCAGGATACGATGCACATGAATTGACT
 AAGTTTACAAGAGAGANNATGAGGCATGTNAGCATCCATGGNCAGTGTAAATCATCT
 GCCTATATGTCACCAATTCCTCCATNC

3' Read Nucleotide Sequence:

>OriGene 3' read for AK021753 unedited
 GTCATTAGNACCGCGCCGAATCTANGATCAGTTTTTTTTTTTTTTTTTTTTTTTTTTT
 AGACGGAGTTTCGCTCTGTGCGCCAGGCCGACTGCGGACTGCAGTGGCGCAATCTCGG
 TCACTGCAAGCTCCGCTTCCCGGTTACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGC
 CGGGACTACAGGCGCCCGCACTGCGCCCGGCTAATTTTTGTATTTTGTAAAGGCGG
 GGTTCACCTTGTAGCCAGGACGGTCTCAATCTCCTGACCTCCTGATCCACCCGCTCG
 GCCTCCCAAAGTCTGGGATTACAGGCGTGAGCCACCGCGCCCGGCTTCTAGTTTT
 TATCATTTCTGTTTAAAAGCTAACAGTCTCATTGTTGCAACTGTGAAGGCAACTGGTGAA
 TTAACGATGGGACACATATCTTTGTCACTACCATCAGGTAGAGGATATTTCCCTGCCT
 GTAATTTTGTAGCAGGCCCGGACTTGTGTTGAAAGGCAGCATGGATGAAGTAGTGTGT
 TTCAATTTTATGCACAGGCTCTAAGAGGCTAGCCAGATGCTTCTGCTTTCACCCTCTT
 GGAGCCCTCAGTCATCATGTGAAATGGCCCAAGACCCCGCTGGAGAAGGAACTGCAGCTG
 TGCCAAACCTAATGCAGCCACCCATTTGAGGCCCAACATTTGAGTAAAGCCCTCTCT
 TGGTGGAGTCCCCCATGTCTTGCAGTTGCCCTAATGAATCCCGGGGAGACCCAAAAAA
 ATGCCACCTGATTCCCCTTCTAACCGGTGATCCTTAGCAAGGAAATATTTGGTTAAG
 GAGTAAATTTGGGGGAGTTTGTAGGCACAAAAAGAACCAGAAAAATTTTGGTTTT
 TAAACAGGGATCCCCGACAAA

Restriction Sites:

NotI-NotI

ACCN:

AK021753

Insert Size:

3080 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: [AK021753.1](#)

RefSeq Size: 2483 bp

RefSeq ORF: 2483 bp

Locus ID: 9723

Cytogenetics: 7q21.11

Protein Families: Secreted Protein

Protein Pathways: Axon guidance

Gene Summary: Semaphorins are a large family of conserved secreted and membrane associated proteins which possess a semaphorin (Sema) domain and a PSI domain (found in plexins, semaphorins and integrins) in the N-terminal extracellular portion. Based on sequence and structural similarities, semaphorins are put into eight classes: invertebrates contain classes 1 and 2, viruses have class V, and vertebrates contain classes 3-7. Semaphorins serve as axon guidance ligands via multimeric receptor complexes, some (if not all) containing plexin proteins. This gene encodes a class 4 semaphorin. This gene encodes a class 3 semaphorin. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2010]