

Product datasheet for SC327566

OriGene Technologies, Inc.

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Semaphorin 7a (SEMA7A) (NM_001146030) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Semaphorin 7a (SEMA7A) (NM_001146030) Human Untagged Clone

Tag: Tag Free

Symbol: Semaphorin 7a

Synonyms: CD108; CDw108; H-SEMA-K1; H-Sema-L; JMH; SEMAK1; SEMAL

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)



Fully Sequenced ORF:

>NCBI ORF sequence for NM_001146030, the custom clone sequence may differ by one or more nucleotides

ATGAGAGGCTACGCCCCTTCAGCCCGGACGAGAACTCCCTGGTTCTGTTTGAAGGGGAC GAGGTGTATTCCACCATCCGGAAGCAGGAATACAATGGGAAGATCCCTCGGTTCCGCCGC ATCCGGGGCGAGAGTGAGCTGTACACCAGTGATACTGTCATGCAGAACCCACAGTTCATC AAAGCCACCATCGTGCACCAAGACCAGGCTTACGATGACAAGATCTACTACTTCTTCCGA GAGGACAATCCTGACAAGAATCCTGAGGCTCCTCTCAATGTGTCCCGTGTGGCCCAGTTG TGCAGGGGGACCAGGGTGGGAAAGTTCACTGTCAGTCTCCAAGTGGAACACTTTTCTG AAAGCCATGCTGGTATGCAGTGATGCTGCCACCAACAAGAACTTCAACAGGCTGCAAGAC GTCTTCCTGCTCCCTGACCCCAGCGGCCAGTGGAGGGACACCAGGGTCTATGGTGTTTTC TCCAACCCCTGGAACTACTCAGCCGTCTGTGTGTATTCCCTCGGTGACATTGACAAGGTC TTCCGTACCTCACTCAAGGGCTACCACTCAAGCCTTCCCAACCCGCGGCCTGGCAAG TGCCTCCCAGACCAGCAGCCGATACCCACAGAGACCTTCCAGGTGGCTGACCGTCACCCA GAGGTGGCGCAGAGGGTGGAGCCCATGGGGCCTCTGAAGACGCCATTGTTCCACTCTAAA GTGCTTTACCTAACTACAGACAGGGGCACTATCCACAAGGTGGTGGAACCGGGGGAGCAG CAGACCATGTCGCTGGATGCTGAGCGGAGGAAGCTGTATGTGAGCTCCCAGTGGGAGGTG AGCCAGGTGCCCCTGGACCTGTGTGAGGTCTATGGCGGGGGCTGCCACGGTTGCCTCATG TCCCGAGACCCCTACTGCGGCTGGGACCAAGGCCGCTGCATCTCCATCTACAGCTCCGAA CGGTCAGTGCTGCAATCCATTAATCCAGCCGAGCCACACAAGGAGTGTCCCAACCCCAAA CCAGACAAGGCCCCACTGCAGAAGGTTTCCCTGGCCCCAAACTCTCGCTACTACCTGAGC TGCCCCATGGAATCCCGCCACGCCACCTACTCATGGCGCCACAAGGAGAACGTGGAGCAG AGCTGCGAACCTGGTCACCAGAGCCCCAACTGCATCCTGTTCATCGAGAACCTCACGGCG CAGCAGTACGGCCACTACTTCTGCGAGGCCCAGGAGGGCTCCTACTTCCGCGAGGCTCAG CACTGGCAGCTGCTGCCCGAGGACGGCATCATGGCCGAGCACCTGCTGGGTCATGCCTGT CAC

Restriction Sites: Please inquire ACCN: NM 001146030

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 customercom 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.

Semaphorin 7a (SEMA7A) (NM_001146030) Human Untagged Clone - SC327566

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 001146030.1</u>, <u>NP 001139502.1</u>

 RefSeq Size:
 3246 bp

 RefSeq ORF:
 1506 bp

 Locus ID:
 8482

 UniProt ID:
 075326

 Cytogenetics:
 15q24.1

Protein Pathways: Axon guidance

Gene Summary: This gene encodes a member of the semaphorin family of proteins. The encoded

preproprotein is proteolytically processed to generate the mature

glycosylphosphatidylinositol (GPI)-anchored membrane glycoprotein. The encoded protein is

found on activated lymphocytes and erythrocytes and may be involved in

immunomodulatory and neuronal processes. The encoded protein carries the John Milton Hagen (JMH) blood group antigens. Mutations in this gene may be associated with reduced bone mineral density (BMD). Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Feb

2016]

Transcript Variant: This variant (3) differs in the 5' UTR and coding sequence compared to variant 1. The resulting isoform (3) has a shorter N-terminus and lacks a predicted signal peptide compared to isoform 1. Sequence Note: This RefSeq record represents the

SEMA7A*001.1.1 allele.