

Product datasheet for RC227403L3

OriGene Technologies, Inc.

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Semaphorin 4D (SEMA4D) (NM 001142287) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Semaphorin 4D (SEMA4D) (NM_001142287) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Semaphorin 4D

Synonyms: A8; BB18; C9orf164; CD100; coll-4; COLL4; GR3; M-sema-G; SEMAJ

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this

Sequence:

The ORF insert of this clone is exactly the same as(RC227403).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001142287

ORF Size: 2214 bp



Semaphorin 4D (SEMA4D) (NM_001142287) Human Tagged Lenti ORF Clone - RC227403L3

OTI Disclaimer: 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 clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

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 001142287.1</u>

 RefSeq ORF:
 2217 bp

 Locus ID:
 10507

 UniProt ID:
 Q92854

 Cytogenetics:
 9q22.2

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Axon guidance

MW: 82 kDa

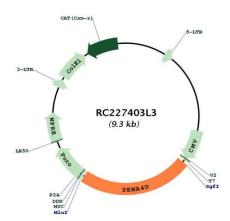
Gene Summary: Cell surface receptor for PLXNB1 and PLXNB2 that plays an important role in cell-cell

signaling (PubMed:20877282). Regulates GABAergic synapse development (By similarity). Promotes the development of inhibitory synapses in a PLXNB1-dependent manner (By similarity). Modulates the complexity and arborization of developing neurites in hippocampal neurons by activating PLXNB1 and interaction with PLXNB1 mediates activation of RHOA (PubMed:19788569). Promotes the migration of cerebellar granule cells (PubMed:16055703). Plays a role in the immune system; induces B-cells to aggregate and improves their viability (in vitro) (PubMed:8876214). Induces endothelial cell migration through the activation of PTK2B/PYK2, SRC, and the phosphatidylinositol 3-kinase-AKT pathway (PubMed:16055703).

[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for RC227403L3