

### Product datasheet for RC227403L4V

#### OriGene Technologies, Inc.

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## Semaphorin 4D (SEMA4D) (NM 001142287) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** Semaphorin 4D (SEMA4D) (NM\_001142287) Human Tagged ORF Clone Lentiviral Particle

Symbol: SEMA4D

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

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_001142287

ORF Size: 2214 bp

**ORF Nucleotide** 

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

Sequence:

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.

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





# Semaphorin 4D (SEMA4D) (NM\_001142287) Human Tagged ORF Clone Lentiviral Particle – RC227403L4V

#### **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]