

Product datasheet for RC238313

OriGene Technologies, Inc.

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SynCAM (CADM1) (NM_001301044) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: SynCAM (CADM1) (NM_001301044) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: SynCAM

Synonyms: BL2; IGSF4; IGSF4A; Necl-2; NECL2; RA175; sgIGSF; ST17; sTSLC-1; SYNCAM; synCAM1; TSLC1

Mammalian Cell Neomycin

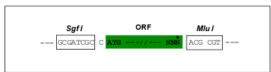
Selection:

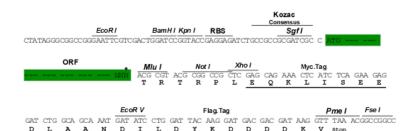
Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Restriction Sites: Sgfl-Mlul

Cloning Scheme: Cloning sites used for ORF Shuttling:





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

ACCN: NM_001301044

ORF Size: 1359 bp





SynCAM (CADM1) (NM_001301044) Human Tagged ORF Clone - RC238313

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 001301044.2</u>

RefSeq Size: 4357 bp
RefSeq ORF: 1362 bp
Locus ID: 23705
UniProt ID: Q9BY67

Cytogenetics: 11q23.3

Protein Families: Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs)

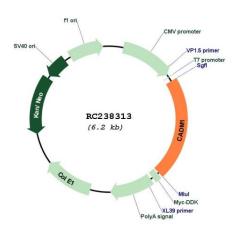
MW: 50.1 kDa



Gene Summary:

Mediates homophilic cell-cell adhesion in a Ca(2+)-independent manner. Also mediates heterophilic cell-cell adhesion with CADM3 and NECTIN3 in a Ca(2+)-independent manner. Acts as a tumor suppressor in non-small-cell lung cancer (NSCLC) cells. Interaction with CRTAM promotes natural killer (NK) cell cytotoxicity and interferon-gamma (IFN-gamma) secretion by CD8+ cells in vitro as well as NK cell-mediated rejection of tumors expressing CADM3 in vivo. May contribute to the less invasive phenotypes of lepidic growth tumor cells. In mast cells, may mediate attachment to and promote communication with nerves. CADM1, together with MITF, is essential for development and survival of mast cells in vivo. Acts as a synaptic cell adhesion molecule and plays a role in the formation of dendritic spines and in synapse assembly (By similarity). May be involved in neuronal migration, axon growth, pathfinding, and fasciculation on the axons of differentiating neurons. May play diverse roles in the spermatogenesis including in the adhesion of spermatocytes and spermatids to Sertoli cells and for their normal differentiation into mature spermatozoa.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC238313