

Product datasheet for SC336158

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

SynCAM (CADM1) (NM_001301045) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: SynCAM (CADM1) (NM 001301045) Human Untagged Clone

Tag: Tag Free
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)

Fully Sequenced ORF: >SC336158 representing NM_001301045.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

AAGGACAGCAGGTTTCAGTTGCTGAATTTTTCTAGCAGTGAACTCAAAGTATCATTGACAAACGTCTCA ATTTCTGATGAAGGAAGATACTTTTGCCAGCTCTATACCGATCCCCCACAGGAAAGTTACACCACCATC ACAGTCCTGGTCCCACCACGTAATCTGATGATCGATATCCAGAAAGACACTGCGGTGGAAGGTGAGGAG GAGCTAAAAGGCAAATCGGAGGTGGAAGAGTGGTCAGACATGTACACTGTGACCAGTCAGCTGATGCTG AAGGTGCACAAGGAGGACGATGGGGTCCCAGTGATCTGCCAGGTGGAGCACCCTGCGGTCACTGGAAAC CTGCAGACCCAGCGGTATCTAGAAGTACAGTATAAGCCTCAAGTGCACATTCAGATGACTTATCCTCTA CAAGGCTTAACCCGGGAAGGGGACGCGCTTGAGTTAACATGTGAAGCCATCGGGAAGCCCCAGCCTGTG ATGGTAACTTGGGTGAGAGTCGATGAAATGCCTCAACACGCCGTACTGTCTGGGCCCAACCTGTTC ATCAATAACCTAAACAAAACAGATAATGGTACATACCGCTGTGAAGCTTCAAACATAGTGGGGAAAGCT CACTCGGATTATATGCTGTATGTATACGACACAACGGCGACGACAGAACCAGCAGTTCACGGCCTTACT CAGTTGCCCAATTCCGCAGAAGAACTGGACAGTGAGGACCTCTCAGATTCCCGAGCAGGTGAAGAAGGC TCGATCAGGGCAGTGGATCATGCCGTGATCGGTGGCGTGGTGGTGGTGTTTCGCCATGCTGTGC TTGCTCATCATTCTGGGGCGCTATTTTGCCAGACATAAAGGTACATACTTCACTCATGAAGCCAAAGGA GCCGATGACGCAGCAGACGCAGACACAGCTATAATCAATGCAGAAGGAGGACAGAACAACTCCGAAGAA

AAGAAAGAGTACTTCATCTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC



SynCAM (CADM1) (NM_001301045) Human Untagged Clone - SC336158

Restriction Sites: Sgfl-Mlul

ACCN: NM_001301045

Insert Size: 1332 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: <u>NM 001301045.1</u>

 RefSeq Size:
 4327 bp

 RefSeq ORF:
 1332 bp

 Locus ID:
 23705

 UniProt ID:
 Q9BY67

 Cytogenetics:
 11q23.3

Protein Families: Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs)

MW: 48.6 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]

Transcript Variant: This variant (5) lacks an alternate in-frame exon compared to variant 3. The resulting isoform (C) has the same N- and C-termini but is shorter compared to isoform A. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.