

Product datasheet for **SC336207**

SynCAM (CADM1) (NM_001301044) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SynCAM (CADM1) (NM_001301044) Human Untagged Clone
Tag:	Tag Free
Symbol:	SynCAM
Synonyms:	BL2; IGSF4; IGSF4A; Necl-2; NECL2; RA175; sglGSF; ST17; sTSLC-1; SYNCAM; synCAM1; TSLC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC336207 representing NM_001301044. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**CGCATCGCC**
 ATGGCGAGTGTAGTGCTGCCGAGCGGATCCAGTGTGCGCGGCAGCGCGGCGGCGCGCTCCCGGG
 CTCCGGCTCCGGCTTCTGCTGTTGCTCTTCTCCGCCGCGCACTGATCCCCACAGGTGATGGGCAGAAT
 CTGTTTACGAAAGACGTGACAGTGATCGAGGGAGAGGTTGCGACCATCAGTTGCCAAGTCAATAAGAGT
 GACGACTCTGTATTGACTACTGAATCCCAACAGGCAGACCATTTATTTTCAGGGACTTCAGGCCTTTG
 AAGGACAGCAGGTTTCAGTTGCTGAATTTTCTAGCAGTGAACAAAGTATCATTGACAAACGTCTCA
 ATTTCTGATGAAGGAAGATACTTTGCCAGCTCTATACCGATCCCCACAGGAAAGTTACACCACCATC
 ACAGTCCCTGGTCCACCACGTAATCTGATGATCGATATCCAGAAAGACACTGCGGTGGAAGGTGAGGAG
 ATTGAAGTCAACTGCACTGCTATGGCCAGCAAGCCAGCCAGCACTATCAGGTGGTTCAAAGGGAACACA
 GAGCTAAAAGGCAATCGGAGGTGGAAGAGTGGTCAGACATGTACACTGTGACCACTGAGCTGATGCTG
 AAGGTGCACAAGGAGGACGATGGGGTCCAGTGATCTGCCAGGTGGAGCACCCCTGCGGTCACTGGAAAC
 CTGCAGACCCAGCGGTATCTAGAAGTACAGTATAAGCCTCAAGTGCACATTCAGATGACTTATCTCTA
 CAAGGCTTAACCCGGGAAGGGGACGCGCTTGAGTTAACATGTGAAGCCATCGGGAAGCCCCAGCCTGTG
 ATGGTAACCTGGGTGAGAGTCGATGATGAAATGCCTCAACACGCCGTACTGTCTGGGCCAACCTGTTT
 ATCAATAACCTAAACAAAACAGATAATGGTACATACCGCTGTGAAGCTTCAAACATAGTGGGGAAGCT
 CACTCGGATTATGCTGTATGTATACGATCCCCCACAACTATCCCTCCTCCCAACAACCAACCACC
 ACCACCACCACCACCACCACCACCATCCTTACCATCATCACAGACACAACGGCGACGACAGAACCAGCA
 GTTCACGATTCGAGCAGGTGAAGAAGGCTCGATCAGGGCAGTGGATCATGCCGTGATCGGTGGCGTC
 GTGGCGGTGGTGGTGTTCGCCATGCTGTGCTTGTCTCATCTTCTGGGCGCTATTTGCCAGACATAAA
 GGTACATACTTCACTCATGAAGCCAAAGGAGCCGATGACGCAGCAGACGCAGACACAGCTATAATCAAT
 GCAGAAGGAGGACAGAACAACCTCCGAAGAAAAGAAAGAGTACTTCATC**TAG**
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC



Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001301044
Insert Size:	1362 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:	<ol style="list-style-type: none"> 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_001301044.1</u>
RefSeq Size:	4357 bp
RefSeq ORF:	1362 bp
Locus ID:	23705
UniProt ID:	<u>Q9BY67</u>
Cytogenetics:	11q23.3
Protein Families:	Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs)
MW:	49.6 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 (4) lacks an alternate in-frame exon compared to variant 3. The resulting isoform (B) 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.