Product datasheet for RC215477L2

SynCAM (CADM1) (NM_014333) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SynCAM (CADM1) (NM_014333) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	SynCAM
Synonyms:	BL2; IGSF4; IGSF4A; Necl-2; NECL2; RA175; sgIGSF; ST17; sTSLC-1; SYNCAM; synCAM1; TSLC1
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC215477).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:

Sgf I   ORF   Mlu I

--- GCG ATC GC C | ATG --- // --- NNN̈ | ACG CGT ---

Kozak Consensus

EcoR I   BamH I   RBS   Sgf I   ORF

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGC C ATG --- --- ---

Mlu I   Not I   Xho I   mGFP Tag

--- --- --- --- --- --- NNN̈ ACG CGT ACG CGG CCG CTC GAG ATG AGC GGG GGC --- --- --- ---
                         T   R   T   R   P   L   E   M   S   G   G   - - - -

Pme I

--- --- GGA CTC AGA TAA GTT TAA ACGGCCGGCCGCGG
 -   -   G   L   R Stop

* The last codon before the Stop codon of the ORF.

ACCN:	NM_014333
ORF Size:	1326 bp

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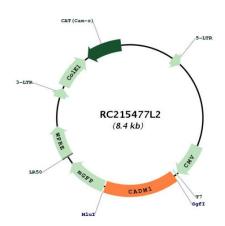|	
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.
	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:	NM_014333.2
RefSeq Size:	3512 bp
RefSeq ORF:	1329 bp
Locus ID:	23705
UniProt ID:	Q9BY67
Cytogenetics:	11q23.3
Domains:	ig, IGc2, IG
Protein Families:	Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs)
MW:	48.3 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 RC215477L2