

Product datasheet for **RG238264**

SynCAM (CADM1) (NM_001301045) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SynCAM (CADM1) (NM_001301045) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CADM1
Synonyms:	BL2; IGSF4; IGSF4A; Necl-2; NECL2; RA175; sglGSF; ST17; sTSLC-1; SYNCAM; synCAM1; TSLC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238264 representing NM_001301045. Blue=ORF Red=Cloning site Green=Tag(s)

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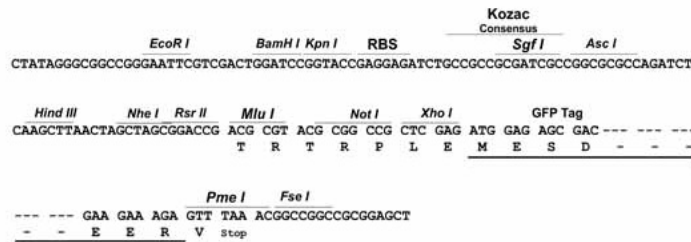
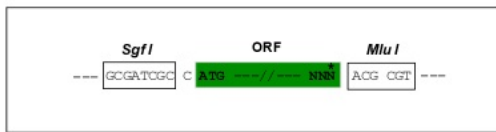
Protein Sequence: >Peptide sequence encoded by RG238264
 Blue=ORF Red=Cloning site Green=Tag(s)

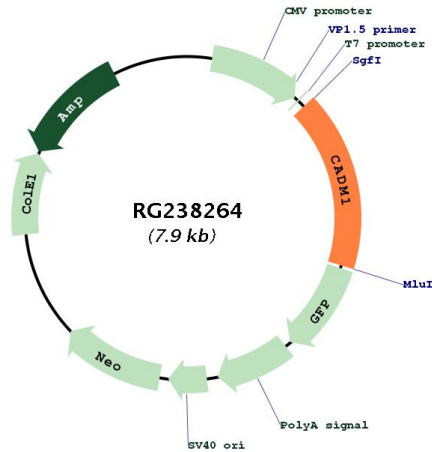
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Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001301045

ORF Size: 1329 bp

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).

RefSeq: [NM_001301045.2](#)

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: 49.1 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]