

Product datasheet for **RG238425**

SynCAM (CADM1) (NM_001301043) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SynCAM (CADM1) (NM_001301043) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SynCAM
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:	>RG238425 representing NM_001301043. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCGAGTGTAGTGCTGCCGAGCGGATCCAGTGTGCGGCGGCAGCGGCGGCGGCGCCCTCCCGGG
CTCCGGCTCCGGCTTCTGCTGTTGCTCTTCCGCGCGGCACTGATCCCACAGGTGATGGGCAGAAT
CTGTTTACGAAAGACGTGACAGTATCGAGGGAGAGGTTGCGACCATCAGTTGCCAAGTCAATAAGAGT
GACGACTCTGTGATTCAGCTACTGAATCCCAACAGGCAGACCATTTATTTTCAAGGACTTCAGGCCTTTG
AAGGACAGCAGGTTTCAGTTGCTGAATTTTCTAGCAGTGAACCAAAGTATCATTGACAAAACGTCTCA
ATTTCTGATGAAGGAAGATACTTTTCCAGCTCTATACCGATCCCCACAGGAAAGTTACACCACCATC
ACAGTCCCTGGTCCCACCACGTAATCTGATGATCGATATCCAGAAAGACACTGCGGTGGAAGGTGAGGAG
ATTGAAGTCAACTGCACTGCTATGGCCAGCAAGCCAGCCAGCACTATCAGGTGGTTCAAAGGGAACACA
GAGCTAAAAGGCAAAATCGGAGGTGGAAGAGTGGTCAGACATGTACACTGTGACCAGTCAGCTGATGCTG
AAGGTGCACAAGGAGGACGATGGGGTCCAGTGTCTGCCAGGTGGAGCACCCCTGCGGTCACTGGAAC
CTGCAGACCCAGCGGTATCTAGAAGTACAGTATAAGCCTCAAGTGCACATTCAGATGACTTATCCTCTA
CAAGGCTTAACCCGGGAAGGGGACGCGCTTGAGTTAACATGTGAAGCCATCGGGAAGCCCCAGCCTGTG
ATGGTAACTTGGGTGAGAGTCGATGATGAAATGCCTCAACACGCCGTACTGTCTGGGCCAACCTGTTC
ATCAATAACCTAAACAAAACAGATAATGGTACATACCGCTGTGAAGCTTCAAACATAGTGGGGAAAGCT
CACTCGGATTATGCTGTATGTATACGATCCCCCACAACATATCCCTCCTCCCACAACAACCACCACC
ACCACCACCACCACCACCACCACCATCCTTACCATCATCACAGACACAACGGCGACGACAGAACCAGCA
GTTACAGGCTTACTCAGTTGCCCAATTCGCAGAAAGTGGACAGTGAAGGACCTCTCAGATTCGCGA
GCAGGTGAAGAAGGCTCGATCAGGGCAGTGGATCATGCCGTGATCGGTGGCGTCTGGCGGTGGTGGTG
TTCGCCATGCTGTGCTTGTCTCATCTTCTGGGGCGCTATTTTCCAGACATAAAGGTACATACTTCACT
CATGAAGCCTAAGGAGCCGATGACGCAGCAGACGCAGACAGCTATAATCAATGCAGAAGGAGGACAG
AACAACTCCGAAGAAAAGAAAGAGTACTTCATC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



[View online >](#)

Protein Sequence: >Peptide sequence encoded by RG238425
 Blue=ORF Red=Cloning site Green=Tag(s)

MASVVLPSGSQCAAAAAAAAAAPPGLRLRLLLLLFSAAAL IPTGDGQNLFTKDVTVIEGEVATISCVNKS
 DDSVIQLLNPNRQTIYFRDFRPLKDSRFQLNFSSELKVSLTNVSI SDEGRYFCQLYDPPQESYTTI
 TVLVPPRNLMDIQKDTAVEGEEIEVNCTAMASKPATTIRWFKGNTELKKGSEVEEWSMYTVTSQLML
 KVHKEDDGVPVICQVEHPAVTGNLQTRYLEVQYKQVHIQMTYPLQGL TREGDALELTCEAIGKPQPV
 MVTWVRVDEMPQHAVLSGPNLF INNLNKTDNGTYRCEASNIVGKAHSDYMLVYVDPPTTIPPTTTTT
 TTTTTTTTILTIITDTTATTEPAVHGLTQLPNSAEELDSEDLSDSRAGEEGSIRAVDHAIVGGVVAVV
 FAMLCLLIILGRYFARHKGTYF THEAKGADDAADADTAIINAEGGQNNSEEKKEYFI
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001301043

ORF Size: 1413 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.

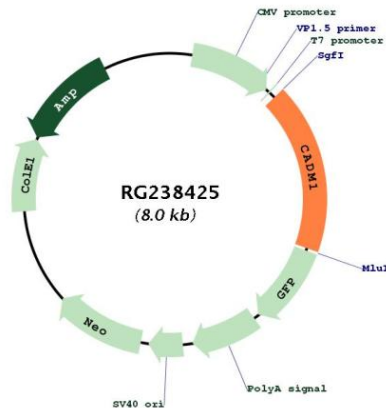
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

RefSeq: [NM_001301043.2](#)

RefSeq Size: 4411 bp
 RefSeq ORF: 1416 bp
 Locus ID: 23705
 UniProt ID: [Q9BY67](#)
 Cytogenetics: 11q23.3
 Protein Families: Transmembrane
 Protein Pathways: Cell adhesion molecules (CAMs)
 MW: 52 kDa

Gene Summary: Mediates homophilic cell-cell adhesion in a Ca²⁺-independent manner. Also mediates heterophilic cell-cell adhesion with CADM3 and NECTIN3 in a Ca²⁺-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 RG238425