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## Product datasheet for RN213821

## Cadm1 (NM_001012201) Rat Untagged Clone

## Product data:

Product Type:
Product Name:
Tag:
Symbol:
Synonyms:
Mammalian Cell
Selection:
Vector:
E. coli Selection:

Expression Plasmids
Cadm1 (NM_001012201) Rat Untagged Clone
Tag Free
Cadm1
Igsf4a; Necl-2; sgigsf; TSLC1
Neomycin
pCMV6-Entry (PS100001)
Kanamycin ( $25 \mathrm{ug} / \mathrm{mL}$ )

Fully Sequenced ORF: >RN213821 representing NM_001012201
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC

ATGGCGAGTCCTGTGCTGCCGAGCGGATCCCAGTGTGCGGCGGCAGCGGCTGTGGCGGCGGCGGCGGCGC CTCCAGGGCTCCGGCTCCGGCTCCTGCTGTTGCTCCTCTCGGCCGCGGCACTGATCCCCACAGGTGATGG GCAGAATCTGTTTACTAAGGACGTGACGGTGATTGAAGGAGAAGTTGCAACCATCAGCTGTCAAGTCAAT AAGAGTGATGACTCCGTGATTCAGCTACTGAACCCCAACAGGCAGACCATTTACTTCAGGGACTTCAGGC CTTTGAAGGACAGCAGGTTTCAGCTGCTGAATTTTTCTAGCAGTGAACTCAAAGTGTCACTGACAAATGT CTCAATTTCGGATGAAGGGAGGTACTTCTGCCAGCTCTACACGGACCCTCCGCAGGAGAGTTATACCACC ATCACAGTCCTGGTCCCTCCACGTAACTTGATGATCGATATCCAGAAAGACACGGCAGTTGAAGGGGAGG AGATTGAAGTCAACTGCACGGCCATGGCCAGCAAGCCGGCTACGACCATCAGGTGGTTCAAAGGGAACAA GGAACTCAAAGGCAAATCAGAGGTGGAAGAGTGGTCGGACATGTACACTGTGACCAGTCAGCTGATGCTG AAGGTGCACAAGGAGGATGATGGAGTCCCAGTGATCTGCCAGGTGGAGCACCCTGCGGTCACTGGAAACC TGCAGACCCAGCGGTATCTAGAAGTGCAGTATAAACCGCAAGTGCAGATCCAGATGACTTATCCTCTGCA AGGCCTAACCCGGGAAGGGGATGCATTCGAGTTAACGTGTGAAGCCACCGGGAAGCCCCAGCCTGTGATG GTAACTTGGGTGAGAGTCGATGACGAAATGCCTCAACATGCCGTTCTGTCTGGGCCGAATCTGTTCATCA ATAACCTAAACAAAACAGACAATGGTACTTACCGCTGTGAGGCTTCCAACACAGTGGGGAAAGCTCATTC GGACTATATGCTGTATGTATACGATCCCCCCACAACTATCCCTCCTCCCACAACAACCACCACCACCACT ACCACCACCACCACCACCACCACCATCCTTACCATCATCACAGACACCACGGCGACGACAGAACCAGCAG TTCACGGCCTTACTCAGTTGCCCAATTCCGCAGAAGAACTGGACAGTGAGGATCTCTCAGATTCTCGAGC AGGTGAAGAGGGCGCCATTGGGGCAGTGGACCACGCGGTGATTGGCGGCGTCGTAGCCGTGGTGGTGTTT GCCATGCTATGTTTGCTCATCATTCTGGGCCGCTATTTTGCCAGACATAAAGGTACATACTTCACTCATG AAGCCAAAGGAGCCGATGACGCAGCAGACGCAGACACAGCTATAATCAATGCAGAAGGAGGACAGAACAA CTCCGAAGAAAAGAAAGAGTACTTCATCTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

| Restriction Sites: | Sgfl-Mlul |
| :--- | :--- |
| ACCN: | NM_001012201 |
| Insert Size: | 1431 bp |

OTI Disclaimer:

## Components:

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.

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).

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

| Reconstitution Method: | 1. Centrifuge at $5,000 \times \mathrm{g}$ for 5 min . <br> 2. Carefully open the tube and add 100 ul of sterile water to dissolve the DNA. <br> 3. Close the tube and incubate for 10 minutes at room temperature. <br> 4. Briefly vortex the tube and then do a quick spin (less than 5000 xg ) to concentrate the liquid at the bottom. <br> 5. Store the suspended plasmid at $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$. |
| :---: | :---: |
| RefSeq: | NM 001012201.1 NP 001012201.1 |
| RefSeq Size: | 1801 bp |
| RefSeq ORF: | 1431 bp |
| Locus ID: | 363058 |
| UniProt ID: | Q6AYP5 |
| Cytogenetics: | 8 q 23 |
| Gene Summary: | Mediates homophilic cell-cell adhesion in a $\mathrm{Ca}(2+)$-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. 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] |

