

## CADM1 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3293a

#### Specification

## CADM1 Antibody (internal region) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB <u>Q9BY67</u> <u>NP\_055148.3</u>, <u>NP\_001091987.1</u>, <u>23705</u>, <u>54725</u> (mouse), <u>363058 (rat)</u> Human Mouse, Rat, Dog Goat Polyclonal 0.5 mg/ml IgG 48509

## CADM1 Antibody (internal region) - Additional Information

Gene ID 23705

**Other Names** 

Cell adhesion molecule 1, Immunoglobulin superfamily member 4, IgSF4, Nectin-like protein 2, NECL-2, Spermatogenic immunoglobulin superfamily, SgIgSF, Synaptic cell adhesion molecule, SynCAM, Tumor suppressor in lung cancer 1, TSLC-1, CADM1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=5951" target="\_blank">HGNC:5951</a>)

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CADM1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

## CADM1 Antibody (internal region) - Protein Information

Name CADM1 (<u>HGNC:5951</u>)

**Function** 

Mediates homophilic cell-cell adhesion in a Ca(2+)- independent manner (PubMed:<a href="http://www.uniprot.org/citations/12050160" target="\_blank">12050160</a>, PubMed:<a



href="http://www.uniprot.org/citations/22438059" target="\_blank">22438059</a>). Also mediates heterophilic cell-cell adhesion with CADM3 and NECTIN3 in a Ca(2+)- independent manner (By similarity). 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 CADM1 in vivo (PubMed:<a

href="http://www.uniprot.org/citations/15811952" target=" blank">15811952</a>). In mast cells, may mediate attachment to and promote communication with nerves (PubMed:<a href="http://www.uniprot.org/citations/15905536" target=" blank">15905536</a>). CADM1, together with MITF, is essential for development and survival of mast cells in vivo (PubMed:<a href="http://www.uniprot.org/citations/22438059" target="\_blank">22438059</a>). By interacting with CRTAM and thus promoting the adhesion between CD8+ T- cells and CD8+ dendritic cells, regulates the retention of activated CD8+ T-cell within the draining lymph node (By similarity). Required for the intestinal retention of intraepithelial CD4+ CD8+ T-cells and, to a lesser extent, intraepithelial and lamina propria CD8+ T-cells and CD4+ T-cells (By similarity). Interaction with CRTAM promotes the adhesion to gut-associated CD103+ dendritic cells, which may facilitate the expression of gut-homing and adhesion molecules on T-cells and the conversion of CD4+ T-cells into CD4+ CD8+ T-cells (By similarity). 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 (By similarity). 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 (By similarity). Acts as a tumor suppressor in non-small-cell lung cancer (NSCLC) cells (PubMed:<a href="http://www.uniprot.org/citations/11279526" target=" blank">11279526</a>, PubMed:<a href="http://www.uniprot.org/citations/12234973" target=" blank">12234973</a>). May contribute to the less invasive phenotypes of lepidic growth tumor cells (PubMed:<a href="http://www.uniprot.org/citations/12920246" target=" blank">12920246</a>).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Synapse {ECO:0000250|UniProtKB:Q8R5M8} Note=Localized to the basolateral plasma membrane of epithelial cells in gall bladder. {ECO:0000250|UniProtKB:Q8R5M8}

## CADM1 Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- CADM1 Antibody (internal region) Images



250kDa
150kDa
100kDa
75kDa
50kDa
37kDa
0510-
25KDa
20kDa
15kDa

AF3293a (1  $\mu$ g/ml) staining of Human Colorectal cancer lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

# CADM1 Antibody (internal region) - Background

This antibody is expected to recognize both reported isoforms (NP\_055148.3; NP\_001091987.1).

#### CADM1 Antibody (internal region) - References

MS-MLPA reveals progressive age-dependent promoter methylation of tumor suppressor genes and possible role of IGSF4 gene in colorectal carcinogenesis of microsatellite instable tumors. Berginc G, Bracko M, Glavac D, Cancer investigation 2010 Jan 28 (1): 94-102. PMID: 19995226