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CADM1 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP10703a

Specification

CADM1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q9BY67

CADM1 Antibody (N-term) Blocking peptide - 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 (HGNC:5951)

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CADM1 Antibody (N-term) Blocking peptide - Protein Information

Name CADM1 (HGNC:5951)

Function
Mediates homophilic cell-cell adhesion in a Ca(2+)- independent manner (PubMed:12050160, PubMed:22438059). 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:15811952). In mast cells, may mediate attachment to and promote communication with nerves (PubMed:15905536). CADM1, together with MITF, is essential for development and survival of mast cells in vivo (PubMed:22438059). 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:11279526, PubMed:12234973). May contribute to the less invasive phenotypes of lepidic growth tumor cells (PubMed:12920246).

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 (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

CADM1 Antibody (N-term) Blocking peptide - Images

CADM1 Antibody (N-term) Blocking peptide - Background

Mediates homophilic cell-cell adhesion in a Ca(2+)-independent manner. Also mediates heterophilic cell-cell adhesion with CADM3 and PVRL3 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. May act as a synaptic cell adhesion molecule that drives 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.

CADM1 Antibody (N-term) Blocking peptide - References

Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)McGovern, D.P., et al. Hum. Mol. Genet. 19(17):3468-3476(2010)Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :You, Y., et al. Melanoma Res. 20(3):179-183(2010)