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Anti-SynCAM Antibody
Catalog # ABO11602

Specification

Anti-SynCAM Antibody - Product Information

Application	**WB**
Primary Accession	Q9BY67
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Cell adhesion molecule 1(CADM1) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SynCAM Antibody - 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)

Calculated MW
48509 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Cell membrane ; Single-pass type I membrane protein . Cell junction, synapse . Associates with perinuclear and plasma membranes in vivo. Localized to the basolateral plasma membrane of epithelial cells in gall bladder. .

Protein Name
Cell adhesion molecule 1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human SynCAM(73-92aa VIQLLNPNRQTIYFRDFRPL), identical to the related mouse and rat sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage

At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Belongs to the nectin family.

Anti-SynCAM Antibody - 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}

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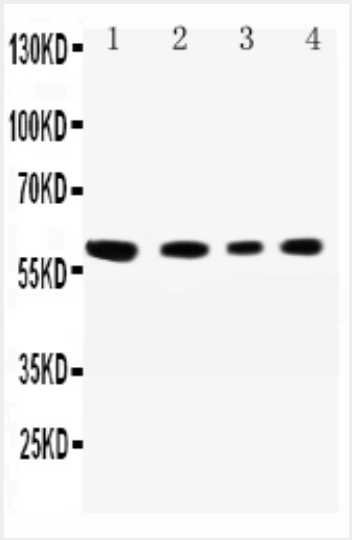
Anti-SynCAM Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-SynCAM Antibody - Images



Anti-SynCAM antibody, ABO11602, All Western blottingAll lanes: Anti-CADM1(ABO11602) at 0.5ug/mlLane 1: A549 Whole Cell Lysate at 40ugLane 2: JURKAT Whole Cell Lysate at 40ugLane 3: RAJI Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugPredicted bind size: 60KDObserved bind size: 60KD

Anti-SynCAM Antibody - Background

Cell adhesion molecule 1 is a protein that, in humans, is encoded by the CADM1 gene. This gene is also known as IGSF4, SYNCAM or TSLC1, and it is mapped to 11q23.3. CADM1 functions as a homophilic cell adhesion molecule at the synapse. Expression of the isolated cytoplasmic tail of CADM1 in neurons inhibited synapse assembly. Conversely, expression of full-length CADM1 in nonneuronal cells induced synapse formation by cocultured hippocampal neurons with normal release properties. CADM1 has been shown to interact with EPB41L3.