

Anti-SynCAM Picoband Antibody
Catalog # ABO11837**Specification****Anti-SynCAM Picoband 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 Picoband 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 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=5951)
HGNC:5951

Calculated MW

48509 MW KDa

Application Details

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

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 Na₃.

Immunogen

E.coli-derived human SynCAM recombinant protein (Position: Q45-P340). Human SynCAM shares 99% amino acid (aa) sequence identity with mouse SynCAM.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r^oConstitution, at 4°C for one month. It^oCan 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 Picoband 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}

Anti-SynCAM Picoband 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 Cytometry](#)
- [Cell Culture](#)

Anti-SynCAM Picoband Antibody - Images

Anti-SynCAM Picoband 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.