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Rabbit Anti-TSLC1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52314

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9BY67
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48509
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TSLC1
Epitope Specificity	365-442/442
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane; Single-pass type I membrane protein. Note=Associates with perinuclear and plasma membranes in vivo. Localized to the basolateral plasma membrane of epithelial cells in gall bladder.
SIMILARITY	Belongs to the nectin family.Contains 2 Ig-like C2-type (immunoglobulin-like) domains.Contains 1 Ig-like V-type (immunoglobulin-like) domain.
SUBUNIT	Homodimer. Interacts with CRTAM and EPB41L3/DAL1. The interaction with EPB41L3/DAL1 may act to anchor CADM1 to the actin cytoskeleton. Interacts via its C-terminus with the PDZ domain of MPP3 and the PDZ domain of MPP6.
DISEASE	Defects in CA12 are the cause of hyperchlorhidrosis isolated (HCHLH) [MIM:143860]. HCHLH is a disorder characterized by excessive sweating and increased sweat chloride levels. Affected individuals suffer from episodes of hyponatremic dehydration and report increased amounts of visible salt precipitates in sweat.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	23705
Other Names	BL2; ST17; IGSF4; NECL2; RA175; TSLC1; IGSF4A; Necl-2; SYNCAM; sgIGSF; sTSLC-1; synCAM1; Cell adhesion molecule 1; Immunoglobulin superfamily member 4; Nectin-like protein 2; Spermatogenic immunoglobulin superfamily; Synaptic cell adhesion molecule; Tumor suppressor in lung cancer 1; TSLC-1; CADM1
Target/Specificity	Highly expressed in colon, kidney, prostate, intestine and activated lymphocytes. Expressed at much higher levels in the renal cell cancers than in surrounding normal kidney tissue. Moderately expressed in pancreas, ovary and testis.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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}

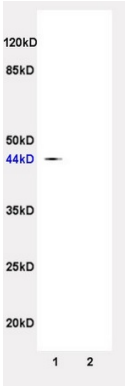
Background

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. 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. 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.

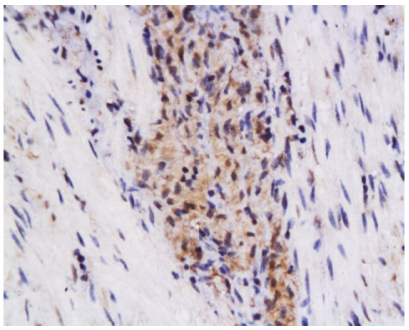
References

Zhou Y.,et al.Biochim. Biophys. Acta 1669:142-154(2005).
Moiseeva E.P.,et al.Cell. Mol. Life Sci. 69:2751-2764(2012).
Ito A.,et al.Submitted (OCT-2002) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Taylor T.D.,et al.Nature 440:497-500(2006).

Images

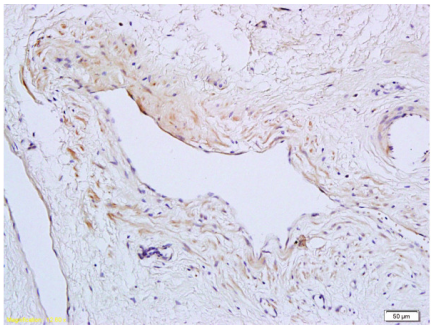


L1 rat brain lysates, L2 rat heart lysates probed (AP52314) Anti-SynCAM/TSLC1 Polyclonal, Unconjugated at 1:200 in 4˚C. Followed by conjugation to secondary antibody at 1:3000 90min in 37˚C. Predicted band and observed band size: 44kD.



Formalin-fixed and paraffin embedded human colon carcinoma labeled with Anti-SynCAM/TSLC1 Polyclonal Antibody, Unconjugated (AP52314) at 1:200 followed by conjugation to the secondary antibody and DAB staining.

Formalin-fixed and paraffin embedded human cervical carcinoma tissue labeled with Anti-SynCAM/TSLC1



Polyclonal Antibody, Unconjugated (AP52314) at 1:200 followed by conjugation to the secondary antibody and DAB staining