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Anti-CD322 Antibody

Catalog # AP61227

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P57087
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33207

Additional Information

Gene ID	58494
Other Names	C21orf43; VEJAM; Junctional adhesion molecule B; JAM-B; Junctional adhesion molecule 2; JAM-2; Vascular endothelial junction-associated molecule; VE-JAM; CD322
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CD322. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/50 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/50 - 1/200) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	JAM2 (HGNC:14686)
Function	Junctional adhesion protein that mediates heterotypic cell- cell interactions with its cognate receptor JAM3 to regulate different cellular processes (PubMed:11590146, PubMed:11823489, PubMed:24357068). Plays a role in homing and mobilization of hematopoietic stem and progenitor cells within the bone marrow (PubMed:24357068). At the surface of bone marrow stromal cells, it contributes to the retention of the hematopoietic stem and progenitor cells expressing JAM3 (PubMed:11590146, PubMed:24357068). Plays a central role in leukocytes extravasation by facilitating not only transmigration but also tethering and rolling of leukocytes along the endothelium (PubMed:12239159). Tethering and rolling of leukocytes are dependent on the binding by JAM2 of the integrin alpha-4/beta-1 (PubMed:12070135). Plays a role in spermatogenesis where JAM2 and JAM3, which are respectively expressed by Sertoli and germ cells, mediate an interaction between both cell

types and play an essential role in the anchorage of germ cells onto Sertoli cells and the assembly of cell polarity complexes during spermatid differentiation (By similarity). Also functions as an inhibitory somatodendritic cue that prevents the myelination of non-axonal parts of neurons (By similarity). During myogenesis, it is involved in myocyte fusion (By similarity). May also play a role in angiogenesis (By similarity).

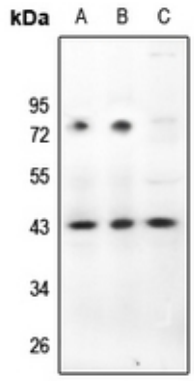
Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell junction. Cell junction, tight junction {ECO:0000250|UniProtKB:Q9JI59}. Note=Localized at tight junctions of both epithelial and endothelial cells (By similarity). Specifically localized within the somatodendritic compartment of neurons and excluded from the axon (By similarity) {ECO:0000250|UniProtKB:Q9JI59}

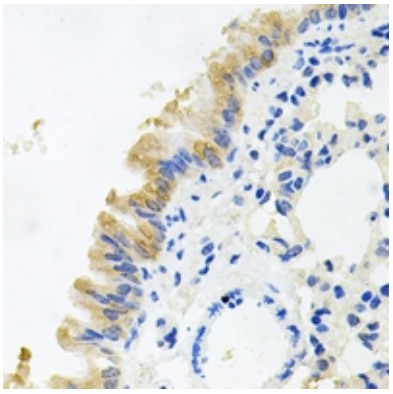
Tissue Location

Highly expressed in heart, placenta, lung, foreskin and lymph node (PubMed:10779521, PubMed:10945976). Prominently expressed on high endothelial venules and also present on the endothelia of other vessels (at protein level) (PubMed:10779521, PubMed:10945976). Also expressed in the brain in the caudate nuclei (PubMed:31851307).

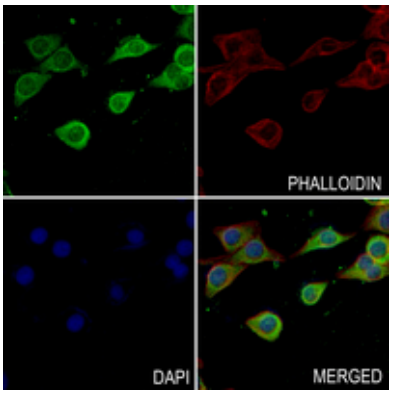
Images



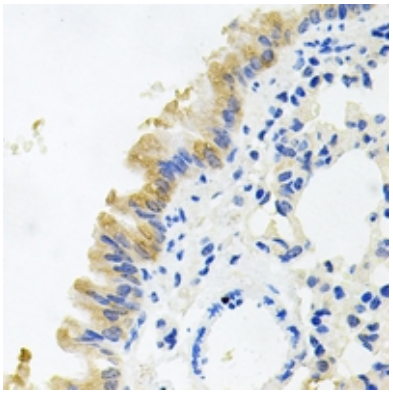
Western blot analysis of CD322 expression in A549 (A), HEK293T (B), MEF (C) whole cell lysates. (Predicted band size: 33 kD; Observed band size: 43 kD)



Immunohistochemical analysis of CD322 staining in mouse lung formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CD322 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Immunohistochemical analysis of CD322 staining in mouse lung formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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