

Rabbit CLDN1 Polyclonal Antibody | anti-CLDN1 antibody

CLDN1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326674	Rabbit	Human, Mouse, Rat	Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

CLDN1; Polyclonal Antibody; CLDN1 Antibody; Claudin-1; Claudin1; CLD 1; CLD1; CLD1_HUMAN; CLDN 1; Cldn1; ILVASC; SEMP 1; SEMP1; Senescence associated epithelial membrane protein 1; Senescence associated epithelial membrane protein; Senescence-associated epithelial membrane protein; anti-CLDN1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	CLDN1 antibody detects endogenous levels of total CLDN1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	211
Applicable Applications for anti-CLDN1 antibody	ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human CLDN1
Subcellular Location	Cell Junction, Tight Junction. Cell Membrane.
Tissue Specificity	Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)

AAA326674 at 1/100 staining Mouse lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



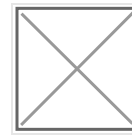
WB (Western Blot)

Western blot analysis of extracts of various cell lines, using CLDN1 antibody.



IF (Immunofluorescence)

AAA326674 staining MCF7 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of MCF7 cell lysate, using CLDN1 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-CLDN1 antibody

Description: Tight junctions, or zonula occludens, form a continuous barrier to fluids across the epithelium and endothelium. They function in regulation of paracellular permeability and in the maintenance of cell polarity, blocking the movement of transmembrane proteins between the apical and the basolateral cell surfaces. Tight junctions are composed of claudin and occludin proteins, which join the junctions to the cytoskeleton (1, 2). The claudin family is composed of 23 integral membrane proteins, and their expression, which varies among tissue types, may determine both the strength and properties of the epithelial barrier. Alteration in claudin protein expression pattern is associated with several types of cancer (2, 3). Claudin-1 is expressed primarily in keratinocytes (4) and normal mammary epithelial cells, but is absent or reduced in breast carcinomas and breast cancer cell lines (5, 6). Function: Claudins function as major constituents of the tight junction complexes that regulate the permeability of epithelia. While some claudin family members play essential roles in the formation of impermeable barriers, others mediate the permeability to ions and small molecules. Often, several claudin family members are coexpressed and interact with each other, and this determines the overall permeability. CLDN1 is required to prevent the paracellular diffusion of small molecules through tight junctions in the epidermis and is required for the normal barrier function of the skin. Required for normal water homeostasis and to prevent excessive water loss through the skin, probably via an indirect effect on the expression levels of other proteins, since CLDN1 itself seems to be dispensable for water barrier formation in keratinocyte tight junctions (PubMed:23407391). Subunit Structure: Homopolymers interact with CLDN3, but not CLDN2, homopolymers. Can form homo- and heteropolymers with other claudin family members (PubMed:23704991). Directly interacts with TJP1/ZO-1, TJP2/ZO-2 and TJP3/ZO-3. Interacts with MPDZ and PATJ (By similarity). Interacts with OCLN, CLDN4, CLDN6 and CLDN9 (PubMed:20375010). Interacts with CD81 (PubMed:20375010, PubMed:21516087). Similarity: Belongs to the claudin family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	10863887
NCBI GeneID	9076
NCBI Accession #	NP_066924.1
NCBI GenBank Nucleotide #	NM_021101.4
UniProt Accession #	O95832
Molecular Weight	Observed: 23 kDa Predicted: 23 kDa
NCBI Official Full Name	claudin-1
NCBI Official Synonym Full Names	claudin 1
NCBI Official Symbol	CLDN1
NCBI Official Synonym Symbols	CLD1; SEMP1; ILVASC
NCBI Protein Information	claudin-1
UniProt Protein Name	Claudin-1
UniProt Gene Name	CLDN1
UniProt Synonym Gene Names	CLD1; SEMP1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cldn1-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326674>