

Rabbit Claudin 1 Polyclonal Antibody | anti-CLDN1 antibody

Phospho-Claudin 1 (Tyr210) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329795	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Chicken (86%), Xenopus (83%)	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Claudin 1; Polyclonal Antibody; Phospho-Claudin 1 (Tyr210) 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 Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Chicken (86%), Xenopus (83%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-Claudin 1 (Tyr210) Antibody detects endogenous levels of Claudin 1 only when phosphorylated at Tyr210. Tissue Specificity: Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-CLDN1 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Claudin 1 around the phosphorylation site of Tyr210.
Conjugation	Unconjugated
Fragment	Fab fragment
Subunit Structure	Homopolymers interact with CLDN3, but not CLDN2, homopolymers. Can form homo- and heteropolymers with other claudin family members. 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. Interacts with CD81. (Microbial infection) Interacts with hepatitis c virus E1 and E2 proteins. (Microbial infection) Interacts with dengue virus small envelope protein M.
Similarity	Belongs to the claudin family.
Subcellular Location	Cell junction>Tight junction. Cell membrane>Multi-pass membrane protein. Basolateral cell membrane. Note: Associates with CD81 and the CLDN1-CD81 complex localizes to the basolateral cell membrane.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
At 1/200 staining Human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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 antibody.



IHC (Immunohistochemistry)
At 1/200 staining Mouse kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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 antibody.



IHC (Immunohistochemistry)
Staining Rat kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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 antibody.



WB (Western Blot)
Western blot analysis of Claudin 1 (Phospho-Tyr210) using HeLa whole cell lysates. -/+ means absence or presence of N peptide(1/4 non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-CLDN1 antibody	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. (Microbial infection) Acts as a receptor for hepatitis C virus (HCV) in hepatocytes. Associates with CD81 and the CLDN1-CD81 receptor complex is essential for HCV entry into host cell. Acts as a receptor for dengue virus.
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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	22,744 Da
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; senescence-associated epithelial membrane protein 1
UniProt Protein Name	Claudin-1
UniProt Gene Name	CLDN1
UniProt Synonym Gene Names	CLD1; SEMP1
UniProt Entry Name	CLD1_HUMAN

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/claudin-1-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/329795>