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Claudin 1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50636

Product Information

Application	WB, IHC
Primary Accession	O95832
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	22744

Additional Information

Gene ID	9076
Other Names	Claudin-1, Senescence-associated epithelial membrane protein, CLDN1, CLD1, SEMP1
Dilution	WB~~1:1000 IHC~~1:50-1:100
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20℃

Protein Information

Name	CLDN1
Synonyms	CLD1, SEMP1
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).
Cellular 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.
Tissue Location	Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.

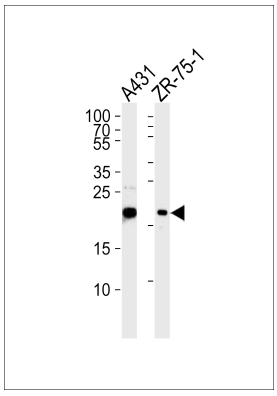
Background

Plays a major role in tight junction-specific obliteration of the intercellular space, through calcium-independent cell-adhesion activity (By similarity). Acts as a co- receptor for HCV entry into hepatic cells.

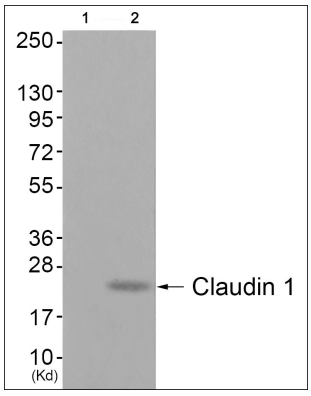
References

Swisshelm K.L.,et al.Gene 226:285-295(1999).
Mitic L.M.,et al.Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
Halford S.,et al.Cytogenet. Cell Genet. 88:217-217(2000).
Kraemer F.,et al.Hum. Genet. 107:249-256(2000).
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).

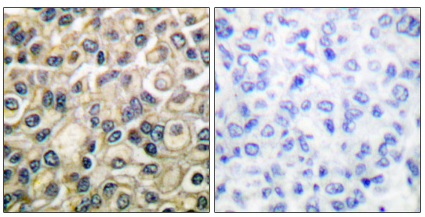
Images



Western blot analysis of lysates from A431,ZR-75-1 cell line (from left to right),using Claudin 1 Antibody(AP50636). AP50636 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.



Western blot analysis of extracts from 293 cells (Lane 2), using Claudin 1 Antibody. The lane on the left is treated with synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Claudin 1 antibody .

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