



Claudin-1 Polyclonal Antibody

Catalog No	YP-Ab-16951
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	CLDN1
Protein Name	Claudin-1
Immunogen	The antiserum was produced against synthesized peptide derived from human Claudin 1. AA range:162-211
Specificity	Claudin-1 Polyclonal Antibody detects endogenous levels of Claudin-1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. IF 1:100-300 Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CLDN1; CLD1; SEMP1; Claudin-1; Senescence-associated epithelial membrane protein
Observed Band	22kD
Cell Pathway	Cell junction, tight junction . Cell membrane ; Multi-pass membrane protein . Basolateral cell membrane . Associates with CD81 and the CLDN1-CD81 complex localizes to the basolateral cell membrane. .
Tissue Specificity	Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.
Function	disease:Defects in CLDN1 are the cause of ichthyosis-sclerosing cholangitis neonatal syndrome (NISCH) [MIM:607626]; also called ichthyosis with leukocyte vacuoles alopecia and sclerosing cholangitis (ILVASC). NISCH is a rare autosomal recessive complex ichthyosis syndrome characterized by scalp hypotrichosis, scarring alopecia, vulgar type ichthyosis, and sclerosing cholangitis.,function: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.,similarity:Belongs to the claudin family.,subunit:Can form homo- and heteropolymers with other CLDN. Homopolymers interact with CLDN3, but not CLDN2, homopolymers. Directly interacts with TJP1/ZO-1, TJP2/ZO-2 and TJP3/ZO-3. Interacts with MPDZ and INADL (By similarity). May interact with HCV E1 an

**Background**

Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. These junctions are comprised of sets of continuous networking strands in the outwardly facing cytoplasmic leaflet, with complementary grooves in the inwardly facing extracytoplasmic leaflet. The protein encoded by this gene, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. Loss of function mutations result in neonatal ichthyosis-sclerosing cholangitis syndrome. [provided by RefSeq, Jul 2008],

matters needing attention

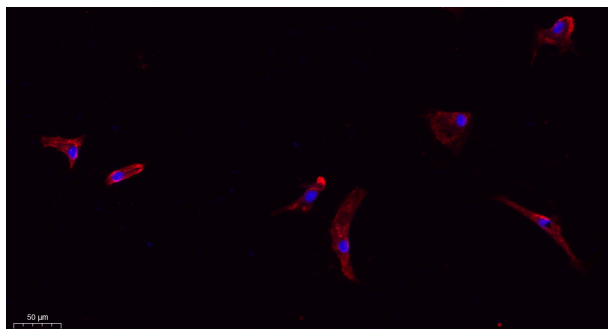
Avoid repeated freezing and thawing!

Usage suggestions

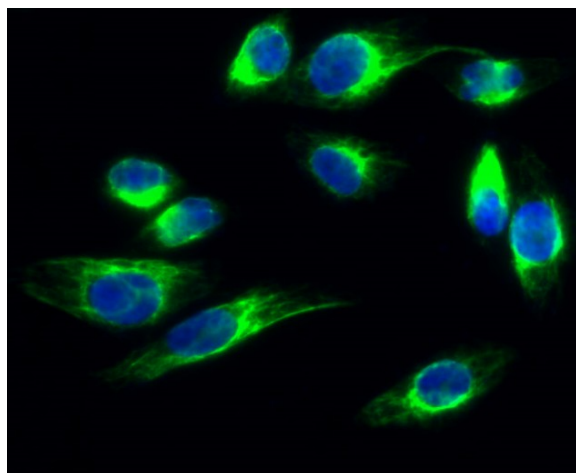
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



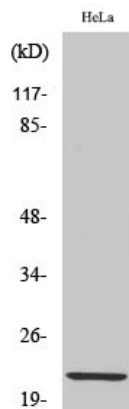
Products Images



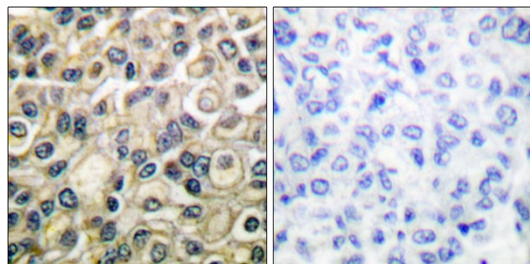
Immunofluorescence analysis of A549. 1, primary Antibody (red) was diluted at 1:200 (4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min.



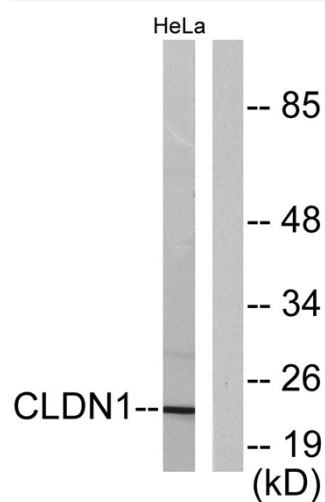
Immunofluorescence analysis of HeLa cell. 1, Claudin-1 Polyclonal Antibody (green) was diluted at 1:200 (4°C overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog: RS3211 was diluted at 1:1000 (room temperature, 50min). 3 DAPI (blue) 10min.



Western Blot analysis of various cells using Claudin-1 Polyclonal Antibody diluted at 1:1000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Claudin 1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa cells, using Claudin 1 Antibody. The lane on the right is blocked with the synthesized peptide.