

### Claudin 1 (ABT-CLD1) Mouse mAb

YM6751 Catalog No:

Reactivity: Human; Mouse; Rat

WB;IHC;ELISA **Applications:** 

Target: Claudin 1

Fields: >>Cell adhesion molecules;>>Tight junction;>>Leukocyte transendothelial

migration;>>Pathogenic Escherichia coli infection;>>Hepatitis C

**Protein Name:** Claudin 1

**Human Gene Id:** 9076

**Human Swiss Prot** 

No:

O95832

Immunogen: Synthesized peptide derived from human Claudin 1 AA range: 150-211

This antibody detects endogenous levels of human Claudin 1. Heat-induced **Specificity:** 

epitope retrieval (HIER) TRIS-EDTA of pH9.0 was highly recommended as

antigen repair method in paraffin section. The antibody w

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Mouse, Monoclonal/IgG1, Kappa

**Dilution:** IHC 1:100-300, WB 1:500-2000., ELISA 1:5000-20000

**Purification:** The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

**Molecularweight:** 23kD

**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],

#### **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

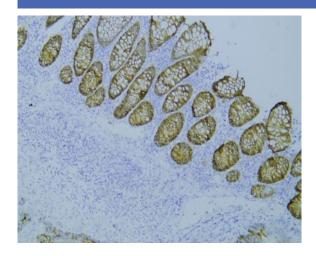
# Subcellular Location:

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..

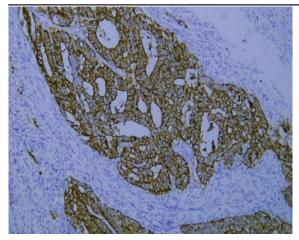
### **Expression:**

Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.

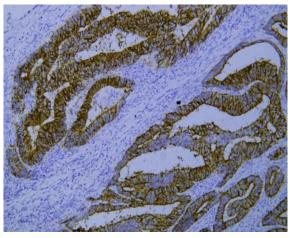
## **Products Images**



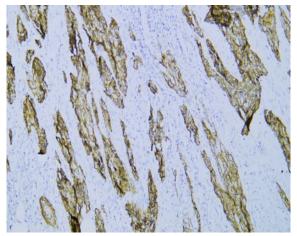
Human colon tissue was stained with Anti-Claudin 1 (ABT-CLD1) Antibody



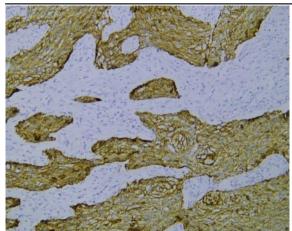
Human colon carcinoma tissue was stained with Anti-Claudin 1 (ABT-CLD1) Antibody



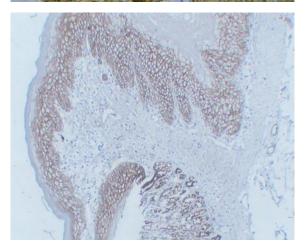
Human colon carcinoma tissue was stained with Anti-Claudin 1 (ABT-CLD1) Antibody



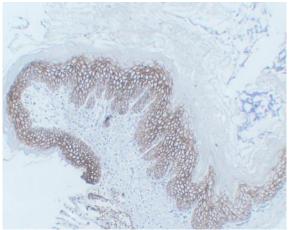
Human gastric adenocarcinoma tissue was stained with Anti-Claudin 1 (ABT-CLD1) Antibody



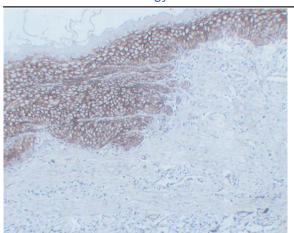
Human gastric adenocarcinoma tissue was stained with Anti-Claudin 1 (ABT-CLD1) Antibody



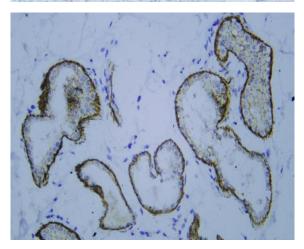
Rat esophagus tissue was stained with Anti-Claudin 1 (ABT-CLD1) Antibody



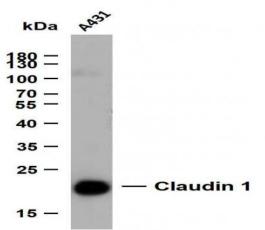
Rat esophagus tissue was stained with Anti-Claudin 1 (ABT-CLD1) Antibody



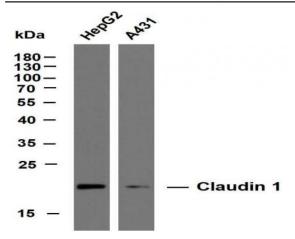
Rat esophagus tissue was stained with Anti-Claudin 1 (ABT-CLD1) Antibody



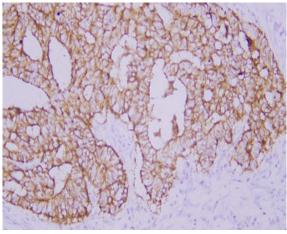
Human skin tissue was stained with Anti-Claudin 1 (ABT-CLD1) Antibody



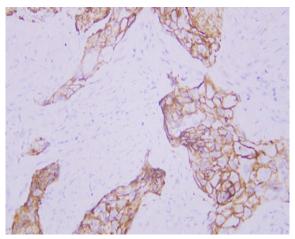
Whole cell lysates were separated by 12% SDS-PAGE, and the membrane was blotted with anti-Claudin 1 (ABT-CLD1)antibody. The HRP-conjugated Goat anti-Mouse IgG(H+L) antibody was used to detect the antibody. Lane 1: A431 Predicted band size: 22kDa Observed band size: 22kDa



Various whole cell lysates were separated by 12% SDS-PAGE, and the membrane was blotted with anti-Claudin 1 (ABT-CLD1) antibody. The HRP-conjugated anti-Mouse IgG antibody was used to detect the antibody. Lane 1: HepG2 Lane 2: A431 Predicted band size: 22kDa Observed band size: 19kDa



Immunohistochemical analysis of paraffin-embedded Colon carcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, TRIS-EDTA of pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemical analysis of paraffin-embedded Gastric adenocarcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, TRIS-EDTA of pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).