For Research Use Only

Claudin 1 Polyclonal antibody

Catalog Number:28674-1-AP Featured Product 95 Publications

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Basic Information

Catalog Number:
28674-1-AP

Size:
550 ug/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG29269

GenBank Accession Number:
BC012471

GeneID (NCBI):
9076

UNIPROT ID:
O95832

Full Name:
claudin 1

Calculated MW:
211 aa, 23 kDa

Observed MW:
20-23 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:6000
IHC 1:500-1:2000
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, pig, canine, sheep

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : A431 cells, mouse skin tissue, rat skin tissue, HepG2 cells

IHC : human colon cancer tissue, human skin cancer tissue, mouse colon tissue, mouse skin tissue

IF/ICC : HUVEC cells,

Background Information

Claudins are a family of proteins that are the most important components of tight junctions, where they establish the paracellular barrier that controls the flow of molecules in the intercellular space between the cells of an epithelium. 23 claudins have been identified. They are small (20-27 kilodalton (kDa)) proteins with similar structures. They have four transmembrane domains, with the N-terminus and the C-terminus in the cytoplasm. Claudin-1 is an integral membrane protein expressed primarily in keratinocytes and normal mammary epithelial cells. Claudin 1 forms tight junctions with other claudin proteins and plays an important role in the intestinal epithelial barrier.
Gut samples are easily degraded, so the collection of gut samples and related immunoblot verification should be completed as quickly as possible.

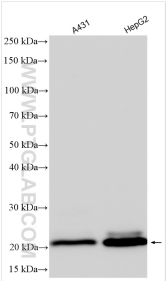
Notable Publications

Author	Pubmed ID	Journal	Application
Yingying Wang	36174863	Int J Biol Macromol	WB,IF
Zhen-Xing Wang	36235602	Nutrients	WB
Jianping Li	36240652	Biochem Biophys Res Commun	WB

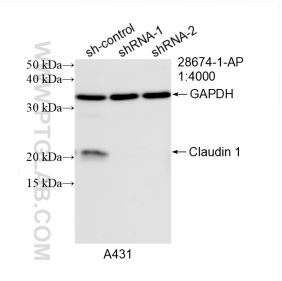
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

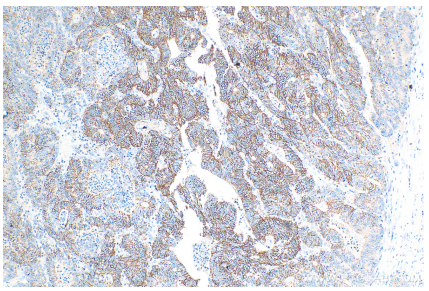
Selected Validation Data



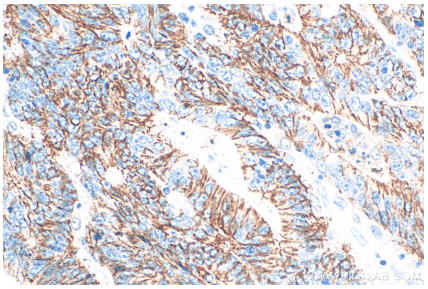
Various lysates were subjected to SDS PAGE followed by western blot with 28674-1-AP (Claudin 1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



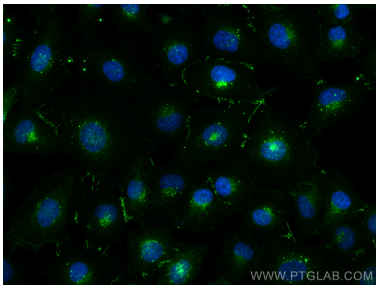
WB result of Claudin 1 antibody (28674-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Claudin 1 transfected A431 cells.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 28674-1-AP (Claudin 1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 28674-1-AP (Claudin 1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HUVEC cells using Claudin 1 antibody (28674-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).