For Research Use Only

Claudin 4-specific Polyclonal antibody

Catalog Number:16195-1-AP Featured Product 51 Publications

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Basic Information

Catalog Number:
16195-1-AP

Size:
150ul , Concentration: 600 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_001305

GeneID (NCBI):
1364

UNIPROT ID:
O14493

Full Name:
claudin 4

Calculated MW:
22 kDa

Observed MW:
22 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:200-1:1000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF-P 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF-P, IP, ELISA

Cited Applications:
WB, IHC, IF, CoIP, RIP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, pig

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 : MDA-MB-453s cells, mouse small intestine tissue, human placenta tissue

IP : human placenta tissue,

IHC : human breast cancer tissue, human ovary tumor tissue

IF-P : human breast cancer tissue,

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. They are small (20-27 kDa) proteins with similar structures. They have four transmembrane domains, with the N-terminus and the C-terminus in the cytoplasm. This antibody is specifically against Claudin 4. Claudin 4 is overexpressed in a variety of cancers. It can be used as a predictor of recurrent malignant pleural effusion in patients with advanced non-small cell lung cancer (PMID: 38629624).

Notable Publications

Author	Pubmed ID	Journal	Application
Yijin Xiang	34616481	Evid Based Complement Alternat Med	WB
Jian Huang	36189316	Front Immunol	WB
Li Qian	36263717	Food Funct	IHC

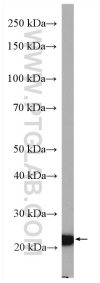
Storage

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

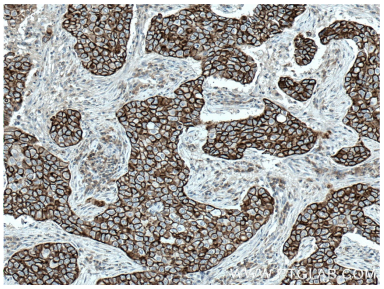
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

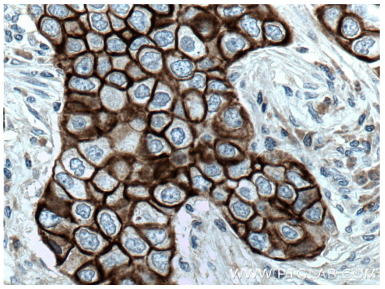
Selected Validation Data



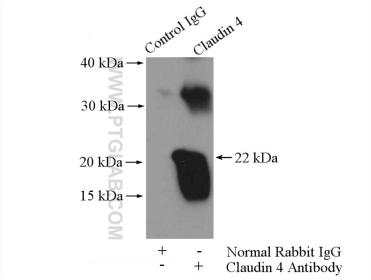
MDA-MB-453s cells were subjected to SDS PAGE followed by western blot with 16195-1-AP (Claudin 4-specific antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



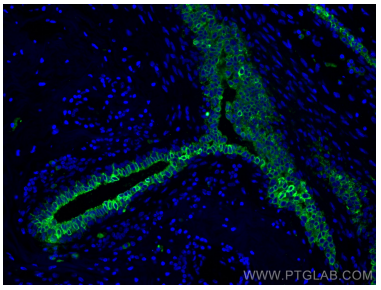
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 16195-1-AP (Claudin 4-specific antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



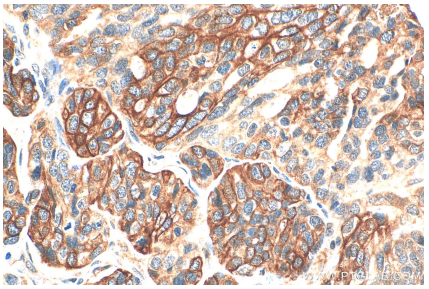
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 16195-1-AP (Claudin 4-specific antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



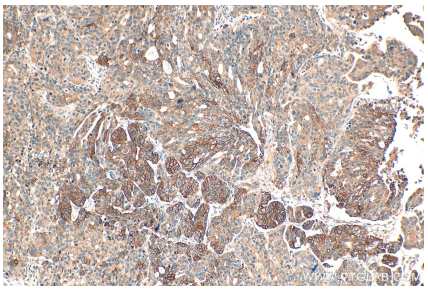
IP result of anti-Claudin 4-specific (IP:16195-1-AP, 4ug; Detection:16195-1-AP 1:300) with human placenta tissue lysate 4400ug.



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using Claudin 4-specific antibody (16195-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 16195-1-AP (Claudin 4-specific antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 16195-1-AP (Claudin 4-specific antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).