For Research Use Only

Claudin 4-specific Polyclonal antibody

Catalog Number: 16195-1-AP

Featured Product

58 Publications



Basic Information

Catalog Number:

16195-1-AP

Source:

Rabbit Isotype: GenBank Accession Number:

NM_001305

GeneID (NCBI):

UNIPROT ID:

014493

Full Name: claudin 4

Calculated MW:

22 kDa

Observed MW:

22 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:2000-1:12000

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, canine, bovine

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: HT-29 cells, human placenta tissue, MDA-MB-453s cells, mouse small intestine tissue, MCF-7 cells, MDA-

MB-231 cells

IP: human placenta tissue,

IHC: human breast cancer tissue, human ovary tumor

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

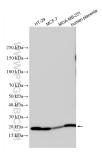
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

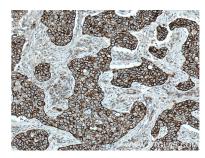
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

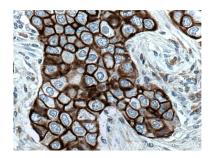
Selected Validation Data



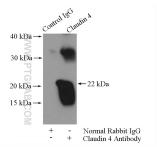
Various lysates were subjected to SDS PAGE followed by western blot with 16195-1-AP (Claudin 4-specific antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



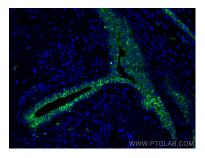
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 16195-1-AP (Claudin 4-specific antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



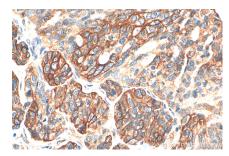
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 16195-1-AP (Claudin 4-specific antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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