## For Research Use Only

# Claudin 4-specific Polyclonal antibody

Catalog Number: 16195-1-AP

Featured Product 51 Publications

NM\_001305

22 kDa

GeneID (NCBI):

GenBank Accession Number:



**Basic Information** 

Catalog Number: 16195-1-AP Concentration: 300 ug/ml

Source: Rabbit Isotype:

**UNIPROT ID:** 014493 Full Name: claudin 4 Calculated MW: 22 kDa Observed MW:

**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

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

For technical support and original validation data for this product please contact:

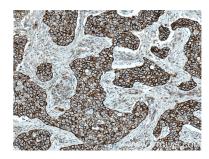
T: 4006900926 E: Proteintech-CN@ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

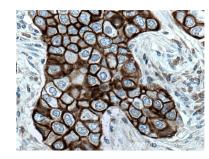
### Selected Validation Data



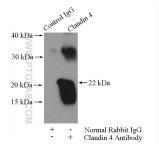
MDA-MB-453s cells were subjected to SDS PAGE followed by western blot with 16195-1-AP (Claudin 4-specific antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



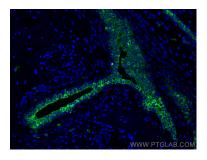
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 16195-1-AP (Claudin 4-specific antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



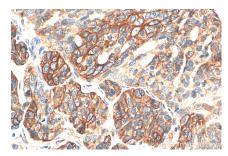
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 16195-1-AP (Claudin 4-specific antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).