

## CLDN7 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10180b

#### Specification

# CLDN7 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P, FC,E <u>O95471</u> NP\_001171951.1, NP\_001298.3 Human Rabbit Polyclonal Rabbit IgG 22418 172-201

# CLDN7 Antibody (C-term) - Additional Information

Gene ID 1366

Other Names Claudin-7, CLDN-7, CLDN7, CEPTRL2, CPETRL2

**Target/Specificity** This CLDN7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 172-201 amino acids from the C-terminal region of human CLDN7.

**Dilution** WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** CLDN7 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# CLDN7 Antibody (C-term) - Protein Information

Name CLDN7



# Synonyms CEPTRL2, CPETRL2

**Function** Plays a major role in tight junction-specific obliteration of the intercellular space.

**Cellular Location** Cell membrane; Multi-pass membrane protein. Basolateral cell membrane. Cell junction, tight junction. Note=Co-localizes with EPCAM at the basolateral cell membrane and tight junction

**Tissue Location** 

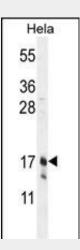
Expressed in kidney, lung and prostate. Isoform 1 seems to be predominant, except in some normal prostate samples, where isoform 2 is the major form. Down-regulated in breast cancers, including ductal carcinoma in situ (DCIS), lobular carcinoma in situ (LCIS) and invasive ductal carcinoma (IDC) (at protein level), as well as in several cancer cell lines. Loss of expression correlates with histological grade, occurring predominantly in high-grade lesions

## CLDN7 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### CLDN7 Antibody (C-term) - Images

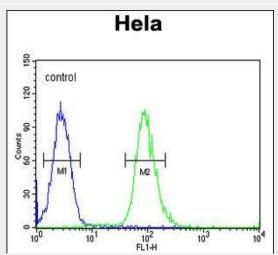


CLDN7 Antibody (C-term) (Cat. #AP10180b) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the CLDN7 antibody detected the CLDN7 protein (arrow).





CLDN7 antibody (C-term) (Cat. #AP10180b) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CLDN7 antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



CLDN7 Antibody (C-term) (Cat. #AP10180b) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# CLDN7 Antibody (C-term) - Background

This gene encodes a member of the claudin family. Claudins are integral membrane proteins and components of tight junction strands. Tight junction strands serve as a physical barrier to prevent solutes and water from passing freely through the paracellular space between epithelial or endothelial cell sheets, and also play critical roles in maintaining cell polarity and signal transductions. Differential expression of this gene has been observed in different types of malignancies, including breast cancer, ovarian cancer, hepatocellular carcinomas, urinary tumors, prostate cancer, lung cancer, head and neck cancers, thyroid carcinomas, etc.. Alternatively spliced transcript variants encoding different isoforms have been found.

# CLDN7 Antibody (C-term) - References

Kojima, F., et al. Oncol. Rep. 23(4):927-931(2010) Rendon-Huerta, E., et al. J Gastrointest Cancer 41(1):52-59(2010)



Ouban, A., et al. Histol. Histopathol. 25(1):83-90(2010) Kaarteenaho, R., et al. Respir. Res. 11, 59 (2010) : Lal-Nag, M., et al. Genome Biol. 10 (8), 235 (2009) :