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CLDN7 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10180b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O95471
Other Accession	NP_001171951.1, NP_001298.3
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23672
Calculated MW	22418
Antigen Region	172-201

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~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
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.

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

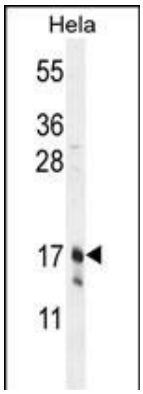
Background

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.

References

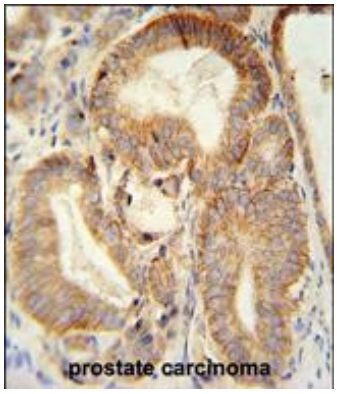
Kojima, F., et al. Oncol. Rep. 23(4):927-931(2010)
Rendon-Huerta, E., et al. J Gastrointest Cancer 41(1):52-59(2010)
Ouban, A., et al. Histol. Histopathol. 25(1):83-90(2010)
Kaarteenaho, R., et al. Respir. Res. 11, 59 (2010) :
Lal-Nag, M., et al. Genome Biol. 10 (8), 235 (2009) :

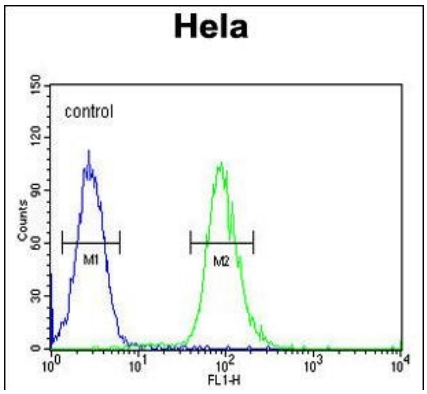
Images



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.