



Rabbit Anti-Claudin 7 antibody

SL23302R

Product Name:	Claudin 7
Chinese Name:	紧密连接蛋白7抗体
Alias:	CEPTR L2; CEPTRL 2; CEPTRL2; Claudin 1; Claudin-7; Claudin1; Claudin7; CLD7_HUMAN; CLDN 7; CLDN-7; CLDN7; Clostridium perfringens enterotoxin receptor like 2; CPETR L2; CPETRL 2; CPETRL2; Hs.84359.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	22kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Claudin 7:151-211/211
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The Claudin superfamily consists of many structurally related proteins in humans (1). These proteins are important structural and functional components of tight junctions in paracellular transport (1,2). Claudins are located in both epithelial and endothelial cells in all tight junction-bearing tissues (1). Three classes of proteins are known to localize to tight junctions, including the Claudins, Occludin and Junction adhesion molecule (3).

Claudins, which consist of four transmembrane domains and two extracellular loops make up tight junction strands (4). Claudin expression is highly restricted to specific regions of different tissues and may have an important role in transcellular transport through tight junctions (5). mRNA studies indicate that Claudin-7 is specifically expressed in mouse lung and kidney, but not in heart, brain, spleen, liver, skeletal muscle or testis (6). The gene encoding human Claudin-7 maps to chromosome 17p13 (7).

Function:

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

Subunit:

Directly interacts with TJP1/ZO-1, TJP2/ZO-2 and TJP3/ZO-3 (By similarity). The phosphorylated form interacts with EPCAM.

Subcellular Location:

Cell membrane. Lateral cell membrane. Cell junction > tight junction. Co-localizes with EPCAM at the lateral cell membrane and tight junction.

Tissue Specificity:

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.

Post-translational modifications:

Phosphorylated.

Similarity:

Belongs to the claudin family.

SWISS:

O95471

Gene ID:

1366

Database links:

[Entrez Gene: 1366](#)?Human

[Entrez Gene: 53624](#)?Mouse

[Entrez Gene: 65132](#)?Rat

[Oimim: 609131](#)?Human

[SwissProt: O95471](#)?Human

[SwissProt: Q9Z261](#)?Mouse

[SwissProt: Q9Z1L1](#)?Rat

[Unigene: 513915](#)?Human

[Unigene: 281896](#)?Mouse

[Unigene: 32259](#)?Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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