

CLAUDIN4 Antibody

Catalog # ASC11543

Product Information

Application	WB, IF, E
Primary Accession	O14493
Other Accession	NP_001296 , 4502877
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	22077
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CLAUDIN4 antibody can be used for detection of CLAUDIN4 by Western blot at 1 µg/mL. For immunofluorescence start at 20 µg/mL.

Additional Information

Gene ID	1364
Other Names	Claudin-4, Clostridium perfringens enterotoxin receptor, CPE-R, CPE-receptor, Williams-Beuren syndrome chromosomal region 8 protein, CLDN4, CPER, CPETR1, WBSCR8
Target/Specificity	CLDN4; At least four isoforms of CLAUDIN4 are known to exist; CLAUDIN4 antibody will detect all four isoforms
Reconstitution & Storage	CLAUDIN4 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	CLAUDIN4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CLDN4 {ECO:0000303 PubMed:35773259, ECO:0000312 HGNC:HGNC:2046}
Function	Can associate with other claudins to regulate tight junction structural and functional strand dynamics (PubMed: 35773259 , PubMed: 36008380). May coassemble with CLDN8 into tight junction strands containing anion-selective channels that convey paracellular chloride permeability in renal collecting ducts (By similarity) (PubMed: 36008380). May integrate into CLDN3 strands to modulate localized tight junction barrier properties (PubMed: 35773259 , PubMed: 36008380). May disrupt strand assembly of channel-forming CLDN2 and CLDN15 and inhibit cation conductance (PubMed: 35773259 ,

PubMed:[36008380](#)). Cannot form tight junction strands on its own (PubMed:[35773259](#), PubMed:[36008380](#)).

Cellular Location

Cell junction, tight junction. Cell membrane; Multi-pass membrane protein

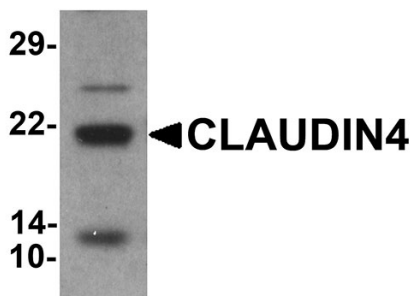
Background

CLAUDIN4 Antibody: CLAUDIN4 is an integral membrane protein belonging to the claudin family, a family of cellular adhesion molecules that are components of tight junctions. CLAUDIN4 is a component of tight junction strands and may play a role in internal organ development and function during pre- and postnatal life. The CLAUDIN4 gene is deleted in Williams-Beuren syndrome, a neurodevelopmental disorder affecting multiple systems. CLAUDIN4 is frequently overexpressed in ovarian and other epithelial cancers.

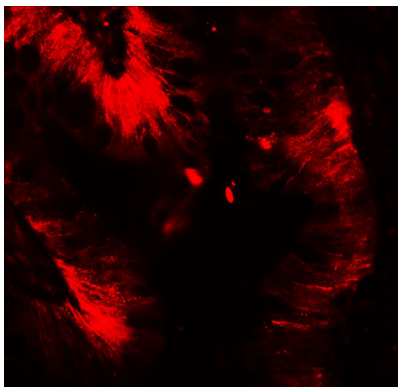
References

Mitic LL, Unger VM, and Anderson JM. Expression, solubilization, and biochemical characterization of the tight junction transmembrane protein claudin-4. *Protein Sci.* 2003; 12:218-27.
Paperna T, Peoples R, Wang YK, et al. Genes for the CPE receptor (CPETR1) and the human homolog of RVP1 (CPETR2) are localized within the Williams-Beuren syndrome deletion. *Genomics* 1998; 54:453-9.
Morin PJ. Claudin proteins in human cancer: promising new targets for diagnosis and therapy. *Cancer Res.* 2005; 65:9603-6.

Images



Western blot analysis of CLAUDIN4 in human colon tissue lysate with CLAUDIN4 antibody at 1 µg/ml



Immunofluorescence of CLAUDIN4 in human colon tissue with CLAUDIN4 antibody at 20 µg/mL.

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