

CLAUDIN4 Antibody
Catalog # ASC11543**Specification****CLAUDIN4 Antibody - Product Information**

Application	WB, IF
Primary Accession	O14493
Other Accession	NP_001296 , 4502877
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	23 kDa KDa
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.

CLAUDIN4 Antibody - Additional InformationGene ID **1364****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.

CLAUDIN4 Antibody - Protein Information**Name** CLDN4**Function**

Channel-forming tight junction protein that mediates paracellular chloride transport in the kidney. Plays a critical role in the paracellular reabsorption of filtered chloride in the kidney collecting ducts. Claudins play a major role in tight junction-specific obliteration of the intercellular space, through calcium-independent cell-adhesion activity.

Cellular Location

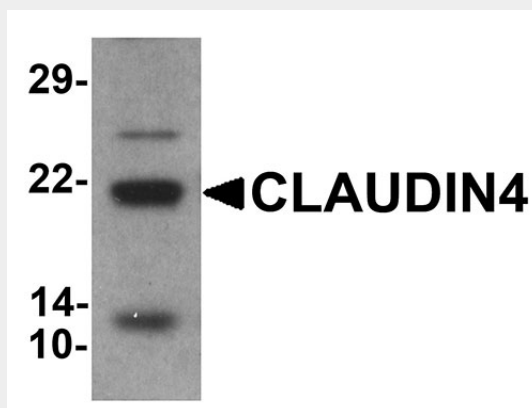
Cell junction, tight junction {ECO:0000250|UniProtKB:O35054}. Cell membrane; Multi-pass membrane protein. Note=CLDN4 is required for tight junction localization in the kidney. {ECO:0000250|UniProtKB:O35054}

CLAUDIN4 Antibody - Protocols

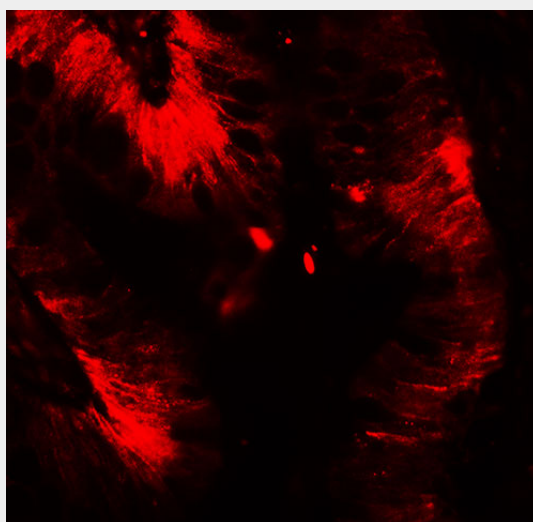
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CLAUDIN4 Antibody - Images



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



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

CLAUDIN4 Antibody - 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.

CLAUDIN4 Antibody - 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.