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CLAUDIN4 Antibody
Catalog # ASC11543

Specification

CLAUDIN4 Antibody - 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	**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 Information

Gene 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℃ for three months and -20℃, 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 {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:<a href="http://www.uniprot.org/citations/36008380"

target="_blank">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).

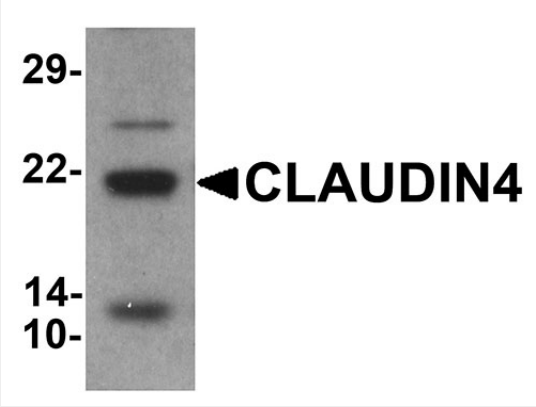
Cellular Location
Cell junction, tight junction. Cell membrane; Multi-pass membrane protein

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 Cytomety
- Cell Culture

CLAUDIN4 Antibody - Images



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

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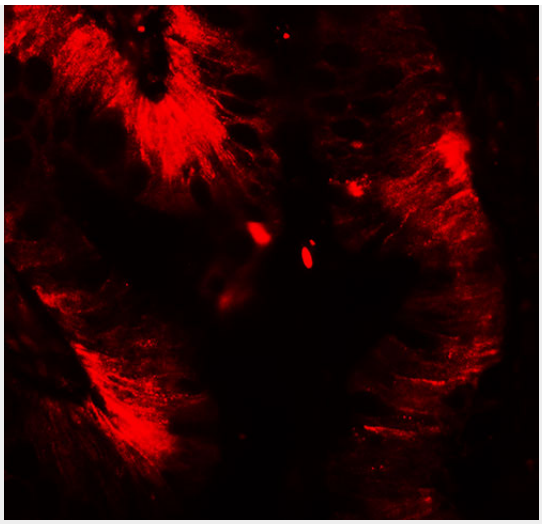

Immunofluorescence of CLAUDIN4 in human colon tissue with CLAUDIN4 antibody at 20 µg/mL.

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.