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OCLN Antibody

OCLN: Occludin

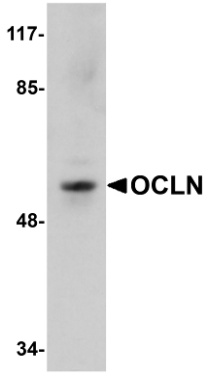
CATALOG No.: 5191

Background:
Tight junctions act as a semi-permeable barrier to the transport of ions, solutes, and water and are considered to function as a fence that divides apical and basolateral domains of plasma membranes. Tight junctions coordinate a variety of signaling and trafficking molecules regulating cell differentiation, proliferation, and polarity and contain a number of junctional proteins including Occludin, Claudins, junctional adhesion molecules (JAMs), as well as multiple scaffold proteins (1,2). Occludin, the first identified component of tight junction strands, is thought function as a signal transmitter in multiple signaling pathways and can associate with multiple kinases and phosphatases such as PI3-kinase and protein phosphatases 1 and 2A (3,4). At least two isoforms of OCLN are known to exist.

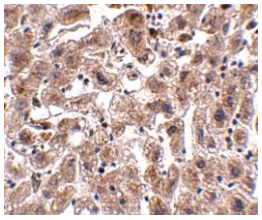
SOURCE:
Rabbit polyclonal OCLN antibody was raised against a 15 amino acid peptide from near the carboxy terminus of human OCLN (GenBank accession no. AAH29886).

APPLICATION:
OCLN antibody can be used for detection of OCLN by Western blot at 1 - 2 µg/ml. (Optimal dilution should be determined by user.) Human liver tissue lysate can be used as positive control. OCLN antibody is human, mouse and rat reactive. **For research use only.**

STORAGE:
OCLN antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4˚C, stable for one year.



Western blot analysis of OCLN in human liver tissue lysate with OCLN antibody at 1 µg/ml.



Immunohistochemistry of OCLN in human liver tissue with OCLN antibody at 2.5 µg/ml.

RELATED PRODUCTS:
Blocking Peptide, Catalog No. **5191P.**
Human Liver Tissue Lysate, Catalog No. **1304.**
CLDN1, Catalog No. **5187.**

REFERENCES:
1. Tsukita S, Furuse M, and Itoh M. Multifunctional strands in tight junctions. *Nat. Rev. Mol. Cell Biol.* 2001; 2:285-93.
2. Chiba H, Osanai M, Murata M, et al. Transmembrane proteins of tight junctions. *Biochim. Biophys. Acta* 2008; 1778:588-600.
3. Furuse M, Hirase T, Itoh M, et al. Occludin: a novel integral membrane protein localizing at tight junctions. *J. Cell Biol.* 1993; 1777-88.
4. Matter K, Aijaz S, Tsapara A, et al. Mammalian tight junctions in the regulation of epithelial differentiation and proliferation. *Curr. Opin. Cell Biol.* 2005; 17:453-8.
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