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Periphilin Antibody
Catalog # ASC11436

Specification

Periphilin Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q8NEY8
Other Accession	NP_958848, 48255929
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**Periphilin antibody can be used for detection of Periphilin by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 5 µg/mL.**

Periphilin Antibody - Additional Information

Gene ID	**51535**

Target/Specificity
PPHLN1;

Reconstitution & Storage
Periphilin 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
Periphilin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Periphilin Antibody - Protein Information

Name PPHLN1 (HGNC:19369)

Function
Component of the HUSH complex, a multiprotein complex that mediates epigenetic repression. The HUSH complex is recruited to genomic loci rich in H3K9me3 and is probably required to maintain transcriptional silencing by promoting recruitment of SETDB1, a histone methyltransferase that mediates further deposition of H3K9me3. In the HUSH complex, contributes to the maintenance of the complex at chromatin (PubMed:26022416). Acts as a transcriptional corepressor and regulates the cell cycle, probably via the HUSH complex (PubMed:15474462, PubMed:17963697). The HUSH complex is also involved in the silencing of unintegrated retroviral DNA: some part of

the retroviral DNA formed immediately after infection remains unintegrated in the host genome and is transcriptionally repressed (PubMed:30487602). May be involved in epithelial differentiation by contributing to epidermal integrity and barrier formation (PubMed:12853457).

Cellular Location
Nucleus. Cytoplasm. Chromosome. Note=In undifferentiated keratinocytes expressed in speckle-type nuclear granules and at the nuclear membrane, but in the differentiated keratinocytes colocalized with periplakin at the cell periphery and at cell-cell junctions (PubMed:12853457) Localizes to chromatin (PubMed:26022416).

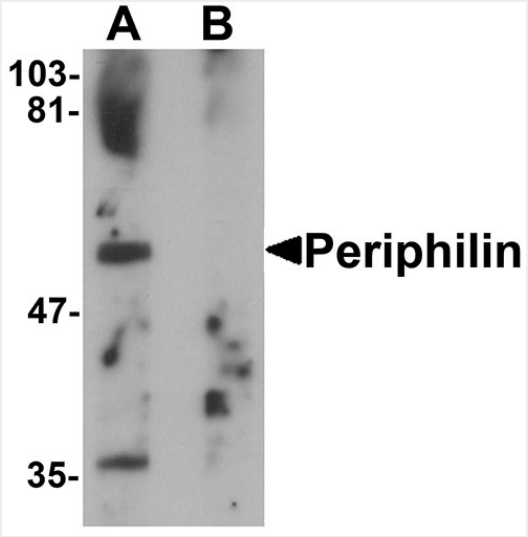
Tissue Location
Ubiquitous..

Periphilin 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

Periphilin Antibody - Images



Western blot analysis of Periphilin in mouse colon tissue lysate with Periphilin antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.

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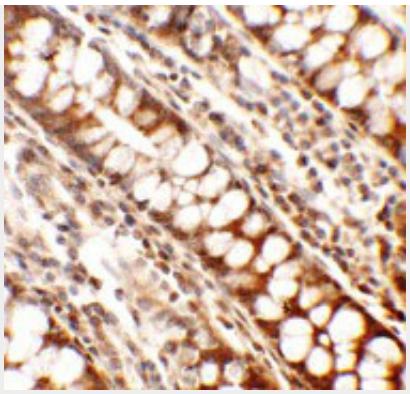
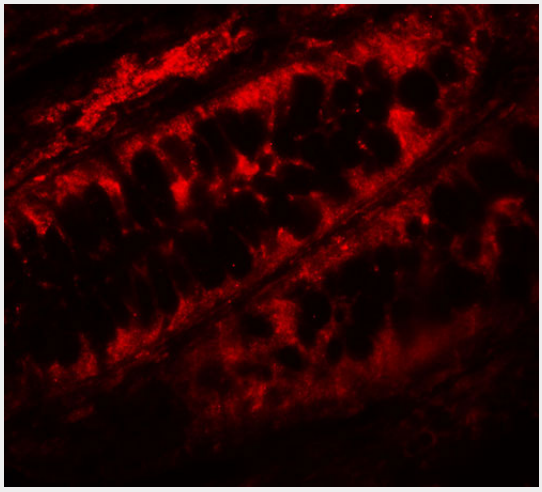


Immunohistochemistry of Periphilin in human colon tissue with Periphilin antibody at 2.5 µg/mL.



Immunofluorescence of Periphilin in human colon tissue with Periphilin antibody at 5 µg/mL.

Periphilin Antibody - Background

Periphilin Antibody: Periphilin, known as PPHLN1 or gastric cancer antigen Ga50, plays a role in epithelial differentiation and contributes to epidermal integrity and barrier formation. It interacts with periplakin, a known precursor of the cornified cell envelope. Periphilin 1 is ubiquitously expressed and localizes to nucleus and cytoplasm. Existing as eight alternatively spliced isoforms, Periphilin is highly insoluble and contains a putative nuclear localization signal (NLS) within its N-terminal half, a prerequisite for the formation of insoluble complexes and a possible caspase recognition sequence and a potential nuclear export signal. Periphilin may play an important role in the nervous system.

Periphilin Antibody - References

Kazerounian S and Aho S. Characterization of periphilin, a widespread, highly insoluble nuclear protein and potential constituent of the keratinocyte cornified envelope. J. Biol. Chem. 2003; 278:36707-17.
Kurita M, Suzuki H, Masai H, et al. Overexpression of CR/periphilin downregulates Cdc7 expression and induces S-phase arrest. Biochem. Biophys. Res. Commun. 2004; 324:554-61
Soehn AS, Pham TT, Schaeferhoff K, et al. Periphilin is strongly expressed in the murine nervous system and is indispensable for murine development. Genesis 2009; 47:697-707
Soehn AS, Franck T, Biskup S, et al. Periphilin is a novel interactor of synphilin-1, a protein implicated in Parkinson's disease. Neurogenetics 2010; 11:203-15