10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Periphilin 1 Polyclonal Antibody

Catalog # AP71848

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q8NEY8
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52737

Additional Information

Gene ID	51535
Other Names	PPHLN1; HSPC206; HSPC232; Periphilin-1; Gastric cancer antigen Ga50
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

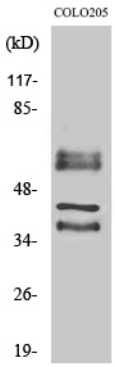
Name	PPHLN1 (HGNC:19369)
Function	RNA-binding component of the HUSH complex, a multiprotein complex that mediates epigenetic repression of mobile genetic elements, such as retroviruses and transposable elements (PubMed:15474462, PubMed:17963697, PubMed:26022416, PubMed:32976585, PubMed:39658355). The HUSH complex mainly represses LINE-1 (L1) retrotransposons that are still capable of transposition (PubMed:32976585, PubMed:39658355). 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, as well as MORC2, a chromatin remodeler that compacts chromatin (PubMed:26022416). 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). Within the HUSH complex, PPHLN1 acts as a mRNA- binding component, which specifically binds nascent transcripts of mobile genetic elements, enabling HUSH-dependent silencing of transcripts (PubMed:39658355).

	Contributes to the maintenance of the HUSH complex at chromatin (PubMed:26022416, PubMed:39013473). As part of the HUSH2 complex, promotes epigenetic repression of interferon- stimulated genes (PubMed:33144593, PubMed:39013473). 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..

Background

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). May be involved in epithelial differentiation by contributing to epidermal integrity and barrier formation (Probable).

Images



Western Blot analysis of various cells using Periphilin 1 Polyclonal Antibody

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