

PPHLN1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51442

Product Information

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

Additional Information

Gene ID	51535
Other Names	Periphilin-1, Gastric cancer antigen Ga50, PPHLN1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PPHLN1. The exact sequence is proprietary.
Dilution	WB~~1:1000 ICC~~N/A IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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

Involved in epithelial differentiation and contributes to epidermal integrity and barrier formation.

References

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Ota T.,et al.Nat. Genet. 36:40-45(2004).
Scherer S.E.,et al.Nature 440:346-351(2006).

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