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

PHF5A / INI Antibody
Rabbit Polyclonal Antibody
Catalog # ALS16474

Specification

PHF5A / INI Antibody - Product Information

Application	**IHC**
Primary Accession	Q7RTV0
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**12kDa KDa**

PHF5A / INI Antibody - Additional Information

Gene ID 84844

Other Names
PHD finger-like domain-containing protein 5A, PHD finger-like domain protein 5A, Splicing factor 3B-associated 14 kDa protein, SF3b14b, PHF5A

Target/Specificity
Human PHF5A / INI

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
PHF5A / INI Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PHF5A / INI Antibody - Protein Information

Name PHF5A

Function
Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:27720643, PubMed:28541300, PubMed:12234937, PubMed:32494006, PubMed:34822310). The 17S U2 SnRNP complex (1) directly participates in early spliceosome assembly and (2) mediates recognition of the intron branch site during pre-mRNA splicing by promoting the selection of the pre-mRNA branch-site adenosine, the nucleophile for the first step of splicing (PubMed:12234937, PubMed:32494006, PubMed:<a

href="http://www.uniprot.org/citations/34822310" target="_blank">34822310). Within the 17S U2 SnRNP complex, PHF5A is part of the SF3B subcomplex, which is required for 'A' complex assembly formed by the stable binding of U2 snRNP to the branchpoint sequence in pre-mRNA (PubMed:12234937, PubMed:27720643). Sequence independent binding of SF3A and SF3B subcomplexes upstream of the branch site is essential, it may anchor U2 snRNP to the pre-mRNA (PubMed:12234937). Also acts as a component of the minor spliceosome, which is involved in the splicing of U12-type introns in pre-mRNAs (PubMed:15146077, PubMed:33509932). Also involved in elongation by RNA polymerase II as part of the PAF1 complex (PAF1C) (By similarity). PAF1C is required for maintenance of embryonic stem cell (ESC) self- renewal and cellular reprogramming of stem cells (By similarity). Maintains pluripotency by recruiting and stabilizing PAF1C on pluripotency genes loci, and by regulating the expression of the pluripotency genes (By similarity). Regulates the deposition of elongation-associated histone modifications, including dimethylated histone H3 'Lys-79' (H3K79me2) and trimethylated histone H3 'Lys-36' (H3K36me3), on PAF1C targets, self-renewal and pluripotency genes (By similarity). Regulates RNA polymerase II promoter-proximal pause release of the PAF1C targets and self-renewal genes, and the levels of elongating ('Ser-2' phosphorylated) RNA polymerase II in their gene bodies (By similarity). Regulates muscle specification in adult stem cells by stabilizing PAF1C in chromatin to promote myogenic differentiation (By similarity). Acts as a transcriptional regulator by binding to the GJA1/Cx43 promoter and enhancing its up-regulation by ESR1/ER-alpha (By similarity).

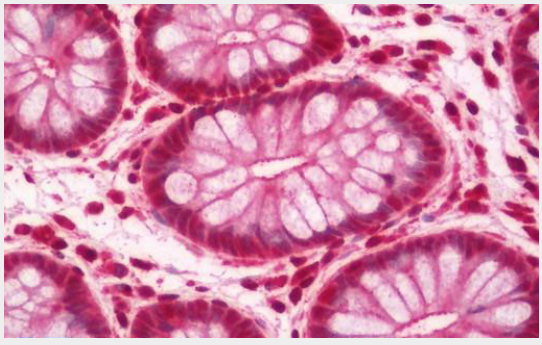
Cellular Location
Nucleus. Nucleus speckle {ECO:0000250|UniProtKB:P83870}

PHF5A / INI Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

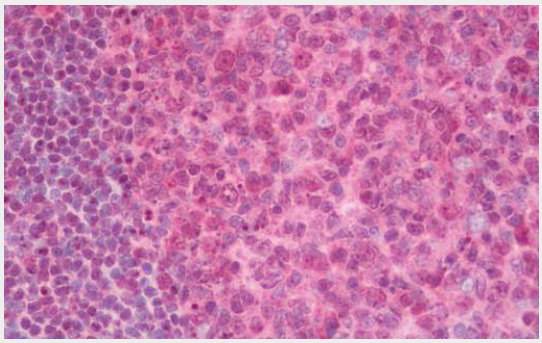
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PHF5A / INI Antibody - Images



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

Human Colon: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Tonsil: Formalin-Fixed, Paraffin-Embedded (FFPE)

PHF5A / INI Antibody - Background

Acts as a transcriptional regulator by binding to the GJA1/Cx43 promoter and enhancing its up-regulation by ESR1/ER- alpha. Also involved in pre-mRNA splicing.

PHF5A / INI Antibody - References

Poleev A.,et al.Development 116:611-623(1992).
Kozmik Z.,et al.Mol. Cell. Biol. 13:6024-6035(1993).
Poleev A.,et al.Eur. J. Biochem. 228:899-911(1995).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 434:724-731(2005).