

PHF8 Antibody
Rabbit mAb
Catalog # AP91527**Specification**

PHF8 Antibody - Product Information

Application	WB, ICC, IP
Primary Accession	Q9UPP1
Reactivity	Rat
Clonality	Monoclonal
Other Names	
Histone lysine demethylase PHF8; MRXSSD; PHD finger protein 8; PHF8; ZNF422;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	117864 Da

PHF8 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PHF8
Description	Involved in cell cycle progression by being required to control G1-S transition. Acts as a coactivator of rDNA transcription, by activating polymerase I (pol I) mediated transcription of rRNA genes.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

PHF8 Antibody - Protein Information**Name** PHF8**Synonyms** KIAA1111, ZNF422**Function**

Histone lysine demethylase with selectivity for the di- and monomethyl states that plays a key role cell cycle progression, rDNA transcription and brain development. Demethylates mono- and dimethylated histone H3 'Lys-9' residue (H3K9Me1 and H3K9Me2), dimethylated H3 'Lys-27' (H3K27Me2) and monomethylated histone H4 'Lys- 20' residue (H4K20Me1). Acts as a transcription activator as H3K9Me1, H3K9Me2, H3K27Me2 and H4K20Me1 are epigenetic repressive marks. Involved in cell cycle progression by being required to control G1-S transition. Acts as a coactivator of rDNA transcription, by activating polymerase I (pol I) mediated transcription of rRNA genes. Required for brain development, probably by regulating expression of neuron-specific genes. Only has activity toward H4K20Me1 when nucleosome is used as a

substrate and when not histone octamer is used as substrate. May also have weak activity toward dimethylated H3 'Lys-36' (H3K36Me2), however, the relevance of this result remains unsure in vivo. Specifically binds trimethylated 'Lys-4' of histone H3 (H3K4me3), affecting histone demethylase specificity: has weak activity toward H3K9me2 in absence of H3K4me3, while it has high activity toward H3K9me2 when binding H3K4me3. Positively modulates transcription of histone demethylase KDM5C, acting synergistically with transcription factor ARX; synergy may be related to enrichment of histone H3K4me3 in regulatory elements.

Cellular Location

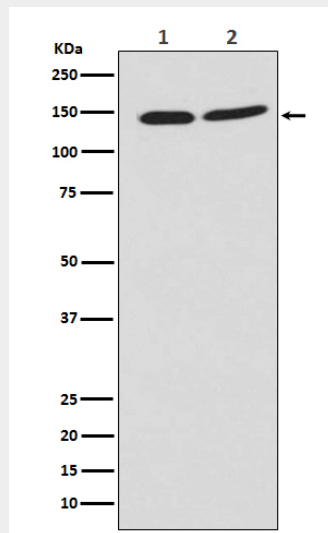
Nucleus. Nucleus, nucleolus Note=Recruited to H3K4me3 sites on chromatin during interphase (PubMed:20622854). Dissociates from chromatin when cells enter mitosis (PubMed:20622854).

PHF8 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 Cytometry](#)
- [Cell Culture](#)

PHF8 Antibody - Images



Western blot analysis of PHF8 expression in (1) Jurkat cell lysate; (2) NIH/3T3 cell lysate.