

Rabbit PHF8 Polyclonal Antibody | anti-PHF8 antibody

PHF8 Antibody

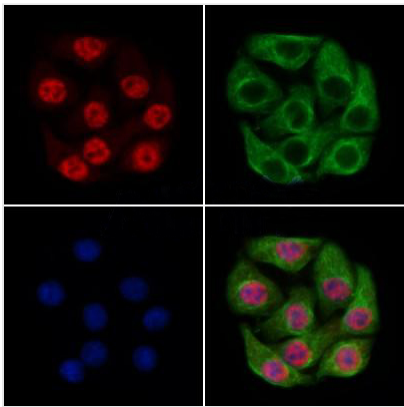
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328953	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Zebrafish(88%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%)	ELISA, Immunocytochemistry, Immunofluorescence

PRODUCT SYNONYMS

PHF8; Polyclonal Antibody; PHF8 Antibody; Histone lysine demethylase PHF8; JHDM1F; Jumonji C domain containing histone demethylase 1F; MRXSSD; PHD finger protein 8; PHF8_HUMAN; ZNF422; anti-PHF8 antibody

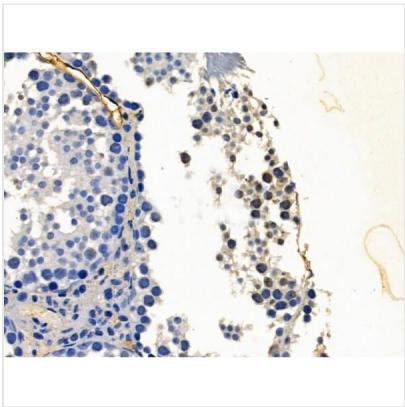
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Zebrafish(88%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%)
Clonality	Polyclonal
Isotype	IgG
Specificity	PHF8 Antibody detects endogenous levels of total PHF8.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Sequence Length	1060
Applicable Applications for anti-PHF8 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence)
Immunogen	A synthesized peptide derived from human PHF8, corresponding to a region within C-terminal amino acids.
Fragment	Fab fragment
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



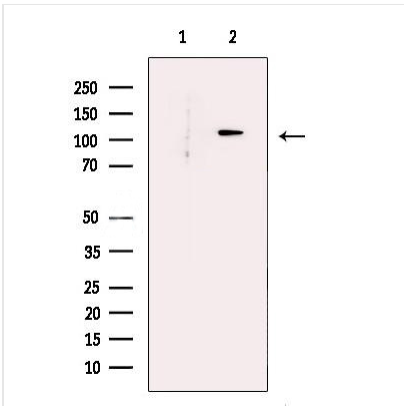
IF (Immunofluorescence)

AAA328953 staining HeLa cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab(AAA328953 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI(blue).



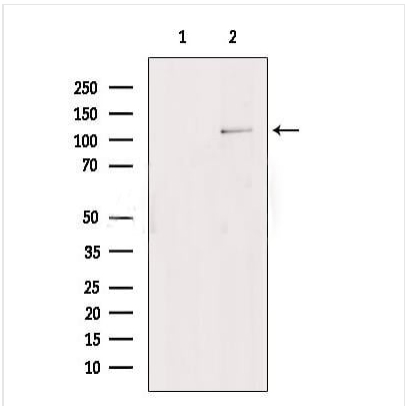
IHC (Immunohistochemistry)

AAA328953 at 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from HeLa cells, using PHF8 Antibody. The lane on the left was treated with blocking peptide.



WB (Western Blot)

Western blot analysis of extracts from HeLa cells, using PHF8 Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-PHF8 antibody	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. Post Translational Modifications: Phosphorylation at Ser-69 and Ser-120 are required for dissociation from chromatin and accumulation of H4K20Me1 levels during prophase. Subcellular Location: Nucleus. Nucleus>Nucleolus. Note: Recruited to H3K4me3 sites on chromatin during interphase. Dissociates from chromatin when cells enter mitosis. Subunit Structure: Interacts with POLR1B, UBTF, SETD1A, HCFC1, E2F1 and ZNF711. Similarity: The PHD-type zinc finger mediates the binding to H3K4me3. Binding to H3K4me3 promotes its access to H3K9me2.The linker region is a critical determinant of demethylase specificity. It enables the active site of JmjC to reach the target H3K9me2 when the PHD-type zinc finger binds to H3K4me3.Belongs to the JHDM1 histone demethylase family. JHDM1D subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	296531349
NCBI GeneID	23133
NCBI Accession #	NP_001171825.1
NCBI GenBank Nucleotide #	NP_001171825.1
UniProt Accession #	Q9UPP1
Molecular Weight	Observed Molecular Weight: (Observed)117kD. Predicted Molecular Weight: (Calculated)118kDa.
NCBI Official Full Name	histone lysine demethylase PHF8 isoform 1
NCBI Official Synonym Full Names	PHD finger protein 8
NCBI Official Symbol	PHF8
NCBI Official Synonym Symbols	KDM7B; JHDM1F; MRXSSD; ZNF422
NCBI Protein Information	histone lysine demethylase PHF8
UniProt Protein Name	Histone lysine demethylase PHF8
UniProt Gene Name	PHF8
UniProt Synonym Gene Names	KIAA1111; ZNF422

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.