

JHDM1D Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP5116c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q6ZMT4
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB26200
Calculated MW	106557
Antigen Region	290-316

Additional Information

Gene ID	80853
Other Names	Lysine-specific demethylase 7A, 11411-, JmjC domain-containing histone demethylation protein 1D, Lysine-specific demethylase 7, KDM7A, JHDM1D, KDM7, KIAA1718
Target/Specificity	This JHDM1D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 290-316 amino acids from the Central region of human JHDM1D.
Dilution	WB~~1:1000 IHC-P~~1:100 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	JHDM1D Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KDM7A
Synonyms	JHDM1D, KDM7, KIAA1718

Function

Histone demethylase required for brain development. Specifically demethylates dimethylated 'Lys-9', 'Lys-27' and 'Lys-36' (H3K9me2, H3K27me2, H3K36me2, respectively) of histone H3 and monomethylated histone H4 'Lys-20' residue (H4K20Me1), thereby playing a central role in histone code (PubMed:[20023638](#), PubMed:[20622853](#)). Specifically binds trimethylated 'Lys-4' of histone H3 (H3K4me3), affecting histone demethylase specificity: in presence of H3K4me3, it has no demethylase activity toward H3K9me2, while it has high activity toward H3K27me2. Demethylates H3K9me2 in absence of H3K4me3 (PubMed:[20023638](#)). Has activity toward H4K20Me1 only when nucleosome is used as a substrate and when not histone octamer is used as substrate (PubMed:[20622853](#)).

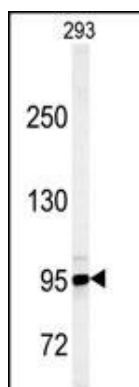
Cellular Location

Nucleus.

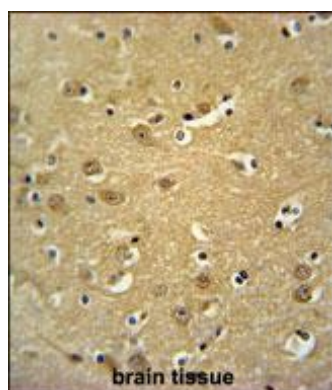
Background

JHDM1D histone demethylase that specifically demethylates dimethylated 'Lys-9' and 'Lys-27' (H3K9me2 and H3K27me2, respectively) of histone H3, thereby playing a central role in histone code. This specifically binds trimethylated 'Lys-4' of histone H3 (H3K4me3), affecting histone demethylase specificity: in presence of H3K4me3, it has no demethylase activity toward H3K9me2, while it has high activity toward H3K27me2. This demethylates H3K9me2 in absence of H3K4me3.

Images

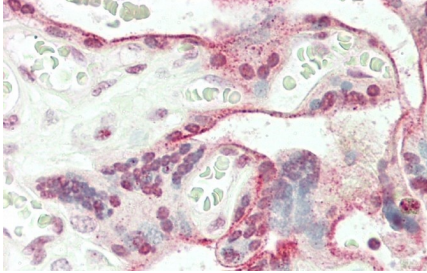
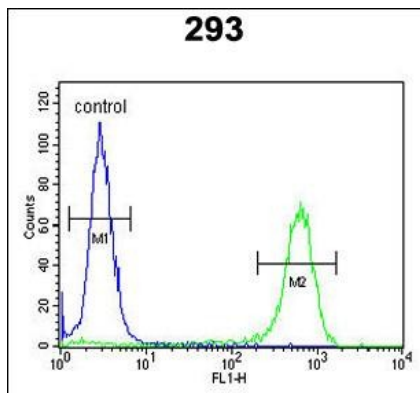


Western blot analysis of JHDM1D Antibody (Center) (Cat. #AP5116c) in 293 cell line lysates (35ug/lane).JHDM1D (arrow) was detected using the purified Pab.

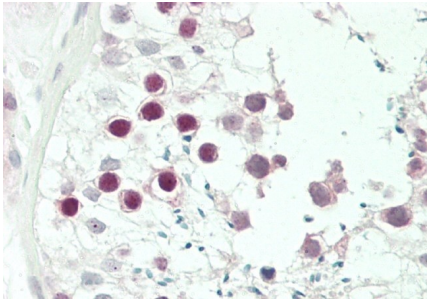


JHDM1D Antibody (Center) (Cat. #AP5116c) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the JHDM1D Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

JHDM1D Antibody (Center) (Cat. #AP5116c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Formalin-fixed and paraffin-embedded H.placenta tissue reacted with JHDM1D Antibody (Center) (Cat#AP5116c).



Formalin-fixed and paraffin-embedded H.testis tissue reacted with JHDM1D Antibody (Center) (Cat#AP5116c).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.