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# JHDM1D Rabbit pAb

JHDM1D Rabbit pAb
Catalog # AP56605

## Product Information

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| **Application** | IHC-P, IHC-F, IF, E |
| **Primary Accession** | Q6ZMT4 |
| **Predicted** | Human, Mouse, Rat, Dog, Pig, Rabbit, Sheep |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 106557 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human JHDM1D |
| **Epitope Specificity** | 501-600/941 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SUBCELLULAR LOCATION** | Nucleus. |
| **SIMILARITY** | Belongs to the JHDM1 histone demethylase family. JHDM1D subfamily. Contains 1 JmjC domain. Contains 1 PHD-type zinc finger. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | JHDM1D is a 941 amino acid protein belonging to the JHDM1 histone demethylase family. Existing as two alternatively spliced isoforms, JHDM1D contains one JmjC domain and a PHD-type zinc finger. The gene encoding JHDM1D maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to Osteogenesis imperfecta, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia. |

## Additional Information

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| **Gene ID** | 80853 |
| **Other Names** | Lysine-specific demethylase 7A, JmjC domain-containing histone demethylation protein 1D, Lysine-specific demethylase 7, [histone H3]-dimethyl-L-lysine9 demethylase 7A, 1.14.11.65, KDM7A, JHDM1D, KDM7, KIAA1718 |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:500 |

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| | 0-10000 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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| **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 is a 941 amino acid protein belonging to the JHDM1 histone demethylase family. Existing as two alternatively spliced isoforms, JHDM1D contains one JmjC domain and a PHD-type zinc finger. The gene encoding JHDM1D maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to Osteogenesis imperfecta, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia.