

**JMJD6 Rabbit mAb [D776]**

**Cat NO. :A31390**

**Information:**

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC	H	Q6NYC1	147,294,49 kDa	Rabbit	IgG	100ul,200ul

**Applications detail:**

Application	Dilution
WB	1:1000-2000
IHC	1:100
The optimal dilutions should be determined by the end user	

**Conjugate:**

UnConjugate

**Form:**

Liquid

**sensitivity:**

Endogenous

**Purification:**

Protein A purification

**Specificity:**

Antibody is produced by immunizing animals with a synthetic peptide at the sequence of human JMJD6

**Storage buffer and conditions:**

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at -20°C or -80°C.

Products are valid for one natural year of receipt.Avoid repeated freeze / thaw cycles.

**Tissue specificity:**

Highly expressed in the heart, skeletal muscle and kidney. Expressed at moderate or low level in brain, placenta, lung, liver, pancreas, spleen, thymus, prostate, testis and ovary. Up-regulated in

**Subcellular location:**

Nucleus, nucleoplasm. Nucleus, nucleolus. Cytoplasm.

**Function:**

**Introduction:** **WB:** Western Blot **IP:** Immunoprecipitation **IHC:** Immunohistochemistry **ChIP:** Chromatin Immunoprecipitation **ICC/IF:** Immunocytochemistry/Immunofluorescence **F:** Flow Cytometry

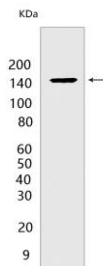
**Cross Reactivity:** **H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Ml:** mink **C:** chicken **Dm** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Hr:** horse

**For Research Use Only. Not For Use In Diagnostic Procedures.**

Dioxygenase that can both act as an arginine demethylase and a lysyl-hydroxylase (PubMed:24498420, PubMed:17947579, PubMed:20684070, PubMed:21060799, PubMed:22189873). Acts as a lysyl-hydroxylase that catalyzes 5-hydroxylation on specific lysine residues of target proteins such as U2AF2/U2AF65 and LUC7L2. Regulates RNA splicing by mediating 5-hydroxylation of U2AF2/U2AF65, affecting the pre-mRNA splicing activity of U2AF2/U2AF65 (PubMed:19574390). Hydroxylates its own N-terminus, which is required for homooligomerization (PubMed:22189873). In addition to peptidyl-lysine 5-dioxygenase activity, may act as an RNA hydroxylase, as suggested by its ability to bind single strand RNA (PubMed:20679243, PubMed:29176719). Also acts as an arginine demethylase which preferentially demethylates asymmetric dimethylation (PubMed:17947579, PubMed:24498420, PubMed:24360279). Demethylates histone H3 at 'Arg-2' (H3R2me) and histone H4 at 'Arg-3' (H4R3me), including mono-, symmetric di- and asymmetric dimethylated forms, thereby playing a role in histone code (PubMed:17947579, PubMed:24360279). However, histone arginine demethylation may not constitute the primary activity in vivo (PubMed:17947579, PubMed:21060799, PubMed:22189873). In collaboration with BRD4, interacts with the positive transcription elongation factor b (P-TEFb) complex in its active form to regulate polymerase II promoter-proximal pause release for transcriptional activation of a large cohort of genes. On distal enhancers, so called anti-pause enhancers, demethylates both histone H4R3me2 and the methyl cap of 7SKsnRNA leading to the dismissal of the 7SKsnRNA:HEXIM1 inhibitor complex. After removal of repressive marks, the complex BRD4:JMJD6 attract and retain the P-TEFb complex on chromatin, leading to its activation, promoter-proximal polymerase II pause release, and transcriptional activation (PubMed:24360279). Demethylates other arginine methylated-proteins such as ESR1 (PubMed:24498420). Has no histone lysine demethylase activity (PubMed:21060799). Required for differentiation of multiple organs during embryogenesis. Acts as a key regulator of hematopoietic differentiation: required for angiogenic sprouting by regulating the pre-mRNA splicing activity of U2AF2/U2AF65 (By similarity). Seems to be necessary for the regulation of macrophage cytokine responses (PubMed:15622002)..

## Validation Data:

### JMJD6 Rabbit mAb [D776] Images



Western blot (SDS PAGE) analysis of extracts from Wild-type HEK-293T cells. Using JMJD6 Rabbit mAb [D776] at dilution of 1:1000 incubated at 4°C overnight.

View more information on <http://naturebios.com>

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.