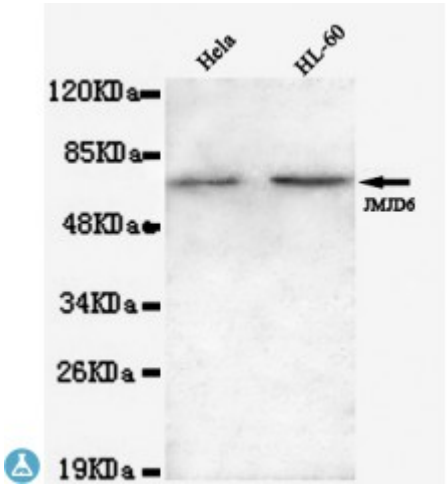
Anti-JMJD6 antibody



Description	Mouse monoclonal to JMJD6.

Model	STJ99026
Host	Mouse
Reactivity	Human
Applications	ELISA, WB
Immunogen	Purified recombinant human JMJD6 (N-term) fragments expressed in E.coli.
Immunogen Region	N-term
Gene ID	23210
Gene Symbol	JMJD6
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	This antibody detects endogenous levels of JMJD6 (N-term) and does not cross-react with related proteins.
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 many patients with chronic pancreatitis. Expressed in nursing thymic epithelial cells.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clone ID	3G5-G5-H8
Note	For Research Use Only (RUO).

Protein Name	Bifunctional arginine demethylase and lysyl-hydroxylase JMJD6 Histone arginine demethylase JMJD6 JmjC domain-containing protein 6 Jumonji domain-containing protein 6 Lysyl-hydroxylase JMJD6 Peptide-lysine 5-dioxygenase JMJD6
Molecular Weight	62kDa
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:19355OMIM:604914
Alternative Names	Bifunctional arginine demethylase and lysyl-hydroxylase JMJD6 Histone arginine demethylase JMJD6 JmjC domain-containing protein 6 Jumonji domain-containing protein 6 Lysyl-hydroxylase JMJD6 Peptide-lysine 5-dioxygenase JMJD6
Function	Dioxygenase that can both act as a histone arginine demethylase and a lysyl-hydroxylase. Acts as a lysyl-hydroxylase that catalyzes 5-hydroxylation on specific lysine residues of target proteins such as U2AF2/U2AF65 and LUC7L2. Acts as a regulator of RNA splicing by mediating 5-hydroxylation of U2AF2/U2AF65, affecting the pre-mRNA splicing activity of U2AF2/U2AF65. In addition to peptidyl-lysine 5-dioxygenase activity, may act as an RNA hydroxylase, as suggested by its ability to bind single strand RNA. Also acts as an arginine demethylase which demethylates histone H3 at 'Arg-2' (H3R2me) and histone H4 at 'Arg-3' (H4R3me), thereby playing a role in histone code. However, histone arginine demethylation may not constitute the primary activity in vivo. Has no histone lysine demethylase activity. 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. Seems to be necessary for the regulation of macrophage cytokine responses.
Sequence and Domain Family	The nuclear localization signal motifs are necessary and sufficient to target it into the nucleus.
Cellular Localization	Nucleus, nucleoplasm. Nucleus, nucleolus. Mainly found throughout the nucleoplasm outside of regions containing heterochromatic DNA, with some localization in nucleolus. During mitosis, excluded from the nucleus and reappears in the telophase of the cell cycle.