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JMJD1B Antibody

Catalog # ASC10967

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q7LBC6
Other Accession	EAW62141, 119582545
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	191581
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	JMJD1B antibody can be used for detection of JMJD1B by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	51780
Other Names	Lysine-specific demethylase 3B, 1.14.11.-, JmjC domain-containing histone demethylation protein 2B, Jumonji domain-containing protein 1B, Nuclear protein 5qNCA, KDM3B, C5orf7, JHDM2B, JMJD1B, KIAA1082
Target/Specificity	KDM3B; This antibody will not cross-react with JMJD1A or JMJD1C.
Reconstitution & Storage	JMJD1B antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	JMJD1B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KDM3B
Synonyms	C5orf7, JHDM2B, JMJD1B, KIAA1082
Function	Histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a central role in histone code. Demethylation of Lys residue generates formaldehyde and succinate. May have tumor suppressor activity.
Cellular Location	Nucleus.

Tissue Location	Ubiquitous. Highly expressed in placenta, skeletal muscle, kidney, heart and liver.

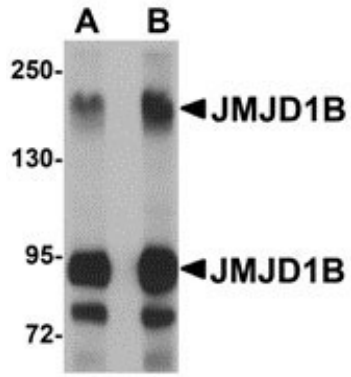
Background

JMJD1B Antibody: The jumonji domain containing 1B protein (JMJD1B) was originally discovered as a candidate for the myeloid leukemia tumor suppressor gene. Besides CD34+ cells and acute myeloid leukemia (AML) cell lines, JMJD1B mRNA is highly expressed in liver, heart, kidney, skeletal muscle, and placenta tissues. The JMJD1B gene is localized to a region of chromosome 5q31, which is frequently deleted in myeloid leukemias and myelodysplasias and expression of JMJD1B in a del(5q) cell line results in suppression of clonogenic growth suggesting that JMJD1B may function as a tumor suppressor. In contrast, JMJD1B gene copy number and mRNA expression level was increased in several non-small cell lung cancers indicating that the role of JMJD1B in cancer formation and progression is more complex than originally postulated. At least three isoforms of JMJD1B are known to exist.

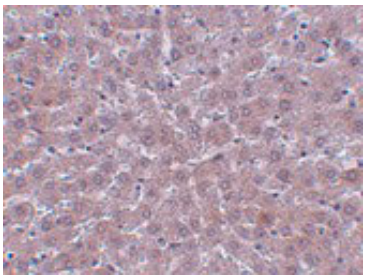
References

Lai F, Godley LA, Fernald AA, et al. cDNA cloning and genomic structure of three genes localized to human chromosome band 5q31 encoding potential nuclear proteins. Genomics2000; 70:123-30.
Hu Z, Gomes I, Horrigan SK, et al. A novel nuclear protein, 5qNCA (LOC51780) is a candidate for the myeloid leukemia tumor suppressor gene on chromosome band q31. Oncogene2001; 20:6946-54.
Baik S-H, Jee B-K, Choi J-S, et al. DNA profiling by array comparative genomic hybridization (CGH) of peripheral blood mononuclear cells (PBMC) and tumor tissue cell in non-small cell lung cancer (NSCLC). Mol. Biol. Rep.2009; 36:1767-78.

Images

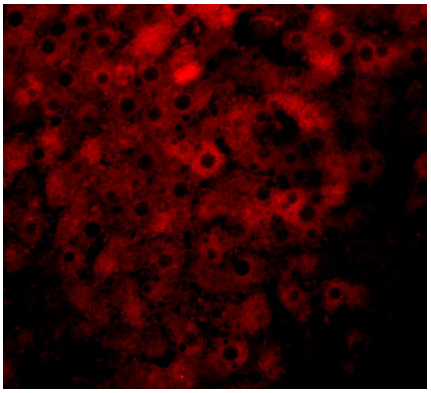


Western blot analysis of JMJD1B in rat liver tissue lysate with JMJD1B antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of JMJD1B in rat liver tissue with JMJD1B antibody at 2.5 µg/mL.

Immunofluorescence of JMJD1B in rat liver tissue with JMJD1B antibody at 20 µg/mL.



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