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KDM5C / Jarid1C / SMCX Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP53266

Product Information

Application	WB, ICC
Primary Accession	P41229
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Calculated MW	175720

Additional Information

Gene ID	8242
Other Names	DXS1272E;Histone demethylase JARID1C;JARID1C;JmjC domain containing protein SMCX;Jumonji AT rich interactive domain 1C;Jumonji, AT rich interactive domain 1C (RBP2 like); Jumonji/ARID domain-containing protein 1C;KDM5C;KDM5C_HUMAN;Lysine (K) specific demethylase 5C;Lysine-specific demethylase 5C;MRXJ;MRXSCJ;MRXSJ;Protein SmcX;Protein Xe169;rbp2 like protein;Selected cDNA on X;SMCX;Smcx homolog X chromosome;SmcX protein; SmcX protein;Smcy homolog X linked;XE169;Xe169 protein;Xe169 protein.
Dilution	WB~~1:1000 ICC~~1:150
Format	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.09% (W/V) sodium azide, 50%,glycerol
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	KDM5C (HGNC:11114)
Function	Histone demethylase that specifically demethylates 'Lys-4' of histone H3, thereby playing a central role in histone code (PubMed:28262558). Does not demethylate histone H3 'Lys-9', H3 'Lys- 27', H3 'Lys-36', H3 'Lys-79' or H4 'Lys-20'. Demethylates trimethylated and dimethylated but not monomethylated H3 'Lys-4'. Participates in transcriptional repression of neuronal genes by recruiting histone deacetylases and REST at neuron-restrictive silencer elements. Represses the CLOCK-BMAL1 heterodimer-mediated transcriptional activation of the core clock component PER2 (By similarity).

Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00355, ECO:0000255|PROSITE-ProRule:PRU00537, ECO:0000269|PubMed:17468742}
Tissue Location	Expressed in all tissues examined. Highest levels found in brain and skeletal muscle.

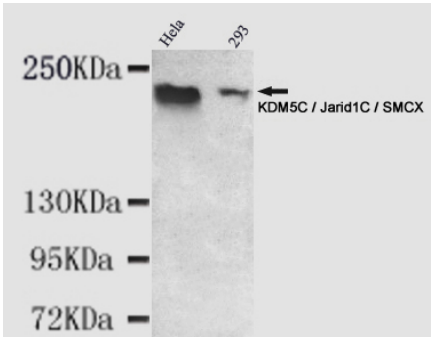
Background

Histone demethylase that specifically demethylates 'Lys- 4' of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-9', H3 'Lys-27', H3 'Lys-36', H3 'Lys-79' or H4 'Lys-20'. Demethylates trimethylated and dimethylated but not monomethylated H3 'Lys-4'. Participates in transcriptional repression of neuronal genes by recruiting histone deacetylases and REST at neuron-restrictive silencer elements. Represses the CLOCK-ARNTL/BMAL1 heterodimer-mediated transcriptional activation of the core clock component PER2 (By similarity).

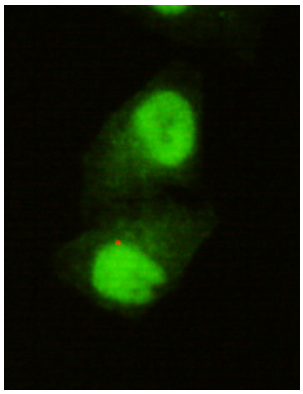
References

Wu J.,et al.Hum. Mol. Genet. 3:153-160(1994).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Ross M.T.,et al.Nature 434:325-337(2005).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Agulnik A.I.,et al.Hum. Mol. Genet. 3:879-884(1994).

Images



Western blot detection of KDM5C / Jarid1C / SMCX in Hela and 293 cell lysates using KDM5C / Jarid1C / SMCX mouse mAb (1:1000 diluted).Predicted band size: 176KDa.Observed band size: 220KDa.



Immunocytochemistry of HeLa cells using anti-KDM5C / Jarid1C / SMCX mouse mAb diluted 1:150.