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JARID2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2206a

Product Information

Application	WB, FC, ICC, E
Primary Accession	Q92833
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	7H1B3
Isotype	IgG2a
Calculated MW	138734
Description	This gene encodes a Jumonji- and AT-rich interaction domain (ARID)-domain-containing protein. The encoded protein is a DNA-binding protein that functions as a transcriptional repressor. This protein interacts with the Polycomb repressive complex 2 (PRC2) which plays an essential role in regulating gene expression during embryonic development. This protein facilitates the recruitment of the PRC2 complex to target genes. Alternate splicing results in multiple transcript variants. Mutations in this gene are associated with chronic myeloid malignancies.
Immunogen	Purified recombinant fragment of human JARID2 (AA: 1097-1246) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	3720
Other Names	Protein Jumonji, Jumonji/ARID domain-containing protein 2, JARID2, JMJ
Dilution	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	JARID2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	JARID2

Synonyms	JMJ
Function	Regulator of histone methyltransferase complexes that plays an essential role in embryonic development, including heart and liver development, neural tube fusion process and hematopoiesis (PubMed:20075857). Acts as an accessory subunit for the core PRC2 (Polycomb repressive complex 2) complex, which mediates histone H3K27 (H3K27me3) trimethylation on chromatin (PubMed:20075857, PubMed:29499137, PubMed:31959557). Binds DNA and mediates the recruitment of the PRC2 complex to target genes in embryonic stem cells, thereby playing a key role in stem cell differentiation and normal embryonic development (PubMed:20075857). In cardiac cells, it is required to repress expression of cyclin-D1 (CCND1) by activating methylation of 'Lys-9' of histone H3 (H3K9me) by the GLP1/EHMT1 and G9a/EHMT2 histone methyltransferases (By similarity). Also acts as a transcriptional repressor of ANF via its interaction with GATA4 and NKX2-5 (By similarity). Participates in the negative regulation of cell proliferation signaling (By similarity). Does not have histone demethylase activity (By similarity).
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00355, ECO:0000255|PROSITE-ProRule:PRU00537, ECO:0000269|PubMed:20075857, ECO:0000269|PubMed:29499137}. Note=Colocalizes with the PRC2 complex on chromatin.
Tissue Location	During embryogenesis, predominantly expressed in neurons and particularly in dorsal root ganglion cells

References

1.PLoS One. 2014 Dec 26;9(12):e115684.2.Am J Hematol. 2012 Mar;87(3):245-50.

Images