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Mouse Jarid2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21537b

Specification

Mouse Jarid2 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q62315
Reactivity	**Mouse**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**137445**

Mouse Jarid2 Antibody (C-term) - Additional Information

Gene ID 16468

Other Names
Protein Jumonji, Jumonji/ARID domain-containing protein 2, Jarid2, Jmj

Target/Specificity
This Mouse Jarid2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1107-1141 amino acids from the C-terminal region of Mouse Jarid2.

Dilution
WB~~1:2000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Mouse Jarid2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Jarid2 Antibody (C-term) - 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:10807864, PubMed:12852854, PubMed:12890668, PubMed:15542826, PubMed:15870077, PubMed:19010785, PubMed:20064375, PubMed:20064376, 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:20064375, PubMed:20064376). 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:20064375, 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 (PubMed:12852854, PubMed:12890668, PubMed:19010785). Also acts as a transcriptional repressor of ANF via its interaction with GATA4 and NKX2-5 (PubMed:15542826). Participates in the negative regulation of cell proliferation signaling (PubMed:10913339). Does not have histone demethylase activity (PubMed:20064376).

Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00355, ECO:0000255|PROSITE-ProRule:PRU00537, ECO:0000269|PubMed:10807864, ECO:0000269|PubMed:10913339, ECO:0000269|PubMed:20064375, ECO:0000269|PubMed:20064376}. Note=Colocalizes with the PRC2 complex on chromatin

Tissue Location
Widely expressed in embryos. In adults, expressed at high levels in heart, skeletal muscle, brain and thymus

Mouse Jarid2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Jarid2 Antibody (C-term) - Images

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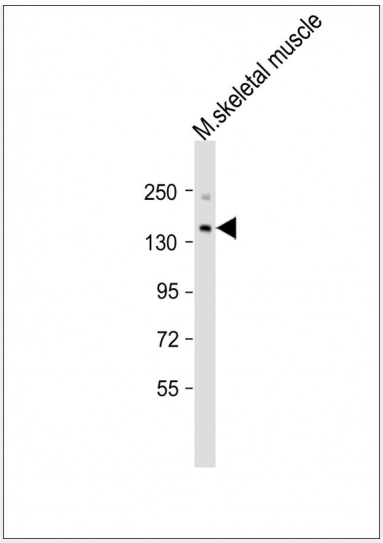

Anti-Jarid2 Antibody (C-term)at 1:2000 dilution + mouse skeletal muscle lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 137 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Mouse Jarid2 Antibody (C-term) - Background

Regulator of histone methyltransferase complexes that plays an essential role in embryonic development, including heart and liver development, neural tube fusion process and hematopoiesis. Acts by modulating histone methyltransferase activity and promoting the recruitment of histone methyltransferase complexes to their target genes. Binds DNA and mediates the recruitment of the PRC2 complex to target genes in embryonic stem cells. Does not have histone demethylase activity but regulates activity of various histone methyltransferase complexes. In embryonic stem cells, it associates with the PRC2 complex and inhibits trimethylation of 'Lys-27' of histone H3 (H3K27me3) by the PRC2 complex, thereby playing a key role in differentiation of embryonic stem cells and normal development. 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. Also acts as a transcriptional repressor of ANF via its interaction with GATA4 and NKX2-5. Participates in the negative regulation of cell proliferation signaling.

Mouse Jarid2 Antibody (C-term) - References

Takeuchi T.,et al.Genes Dev. 9:1211-1222(1995).
Carninci P.,et al.Science 309:1559-1563(2005).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Motoyama J.,et al.Mech. Dev. 66:27-37(1997).
Takeuchi T.,et al.Mech. Dev. 86:29-38(1999).