

JARID2 polyclonal antibody Rabbit Polyclonal Antibody

Catalog # ABV11390

## Specification

# JARID2 polyclonal antibody - Product Information

Application	E
Primary Accession	<u>Q92833</u>
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	138734

### JARID2 polyclonal antibody - Additional Information

Gene ID 3720

Positive Control Application & Usage **Other Names** JMJ ELISA: Peptides. ELISA: 1:500.

Target/Specificity JARID2

Antibody Form Liquid

Appearance Colorless liquid

**Formulation** In PBS with 0.05% (W/V) sodium azide.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 

**Precautions** JARID2 polyclonal antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### JARID2 polyclonal antibody - 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: <a href="http://www.uniprot.org/citations/20075857" target=" blank">20075857</a>). Acts as an accessory subunit for the core PRC2 (Polycomb repressive complex 2) complex, which mediates histone H3K27 (H3K27me3) trimethylation on chromatin (PubMed:<a href="http://www.uniprot.org/citations/20075857" target=" blank">20075857</a>, PubMed:<a href="http://www.uniprot.org/citations/29499137" target=" blank">29499137</a>, PubMed:<a href="http://www.uniprot.org/citations/31959557" target=" blank">31959557</a>). 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:<a href="http://www.uniprot.org/citations/20075857" target=" blank">20075857</a>). 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

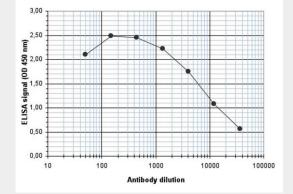
### **JARID2** polyclonal antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### JARID2 polyclonal antibody - Images





To determine the titer, an ELISA was performed using a serial dilution of the antibody. The wells were coated with the peptide used for immunization of the rabbit. By plotting the absorbance against the antibody dilution, the titer of the antibody was estimated to be 1:9300.

### JARID2 polyclonal antibody - Background

JARID2 is a regulator of histone methyltransferase complexes that plays an essential role in embryonic development, including heart and liver development, neural tube fusion process and hematopoiesis. JARID2 acts by recruiting histone methyltransferase complexes (PRC2) to their target genes and modulating the histone methyltransferase activity. It 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 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 H3K9 methylation by the GLP1/EHMT1 and G9a/EHMT2 histone methyltransferases.