abcam

Product datasheet

Anti-Jarid2 antibody [EPR6357(2)] - BSA and Azide free ab251123



Recombinant

RabMAb

6 Images

Overview

Product name Anti-Jarid2 antibody [EPR6357(2)] - BSA and Azide free

Description Rabbit monoclonal [EPR6357(2)] to Jarid2 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, ICC/IF, ChIP

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

General notes ab251123 is the carrier-free version of <u>ab192252</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR6357(2)

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab251123 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 139 kDa (predicted molecular weight: 139 kDa).
ICC/IF		Use at an assay dependent concentration.
ChIP		Use at an assay dependent concentration.

Target

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. 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.

Tissue specificity During embryogenesis, predominantly expressed in neurons and particularly in dorsal root

ganglion cells.

Sequence similarities Contains 1 ARID domain.

Contains 1 JmjC domain. Contains 1 JmjN domain.

Domain

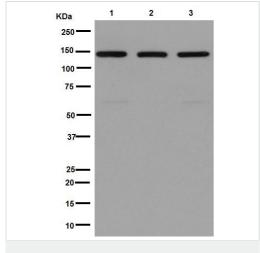
The ARID domain is required to target the PRC2 complex to its target genes.

The GSGFP motif is required for the interaction with SUZ12.

Cellular localization

Nucleus. Colocalizes with the PRC2 complex on chromatin.

Images



Western blot - Anti-Jarid2 antibody [EPR6357(2)] - BSA and Azide free (ab251123)

All lanes : Anti-Jarid2 antibody [EPR6357(2)] - ChIP Grade

(ab192252) at 1/10000 dilution

Lane 1 : NCCIT cell lysate

Lane 2 : SH-SY5Y cell lysate

Lane 3 : 293 cell lysate

Lysates/proteins at 20 µg per lane.

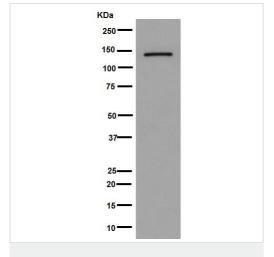
Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 139 kDa **Observed band size:** 139 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab192252</u>).

Blocking/Dilution buffer: 5% NFDM /TBST.



Western blot - Anti-Jarid2 antibody [EPR6357(2)] - BSA and Azide free (ab251123)

Anti-Jarid2 antibody [EPR6357(2)] - ChIP Grade (ab192252) at 1/1000 dilution + U87-MG cell lysate at 20 µg

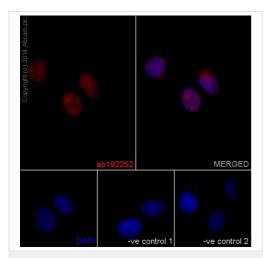
Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

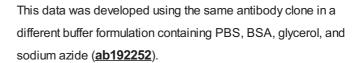
Predicted band size: 139 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab192252</u>).

Blocking/Dilution buffer: 5% NFDM /TBST.

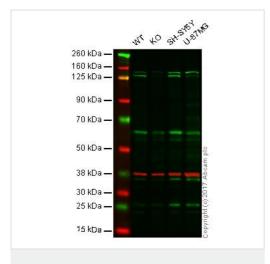


Immunocytochemistry/ Immunofluorescence - Anti-Jarid2 antibody [EPR6357(2)] - BSA and Azide free (ab251123)



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% triton X-100 permeabilized SH-SY5Y cells labeling Jarid2 with ab192252 at 1/100 dilution, followed by Goat anti rabbit IgG (Alexa Fluor® 555) secondary antibody (ab150078) at 1/500 dilution. Nuclear counter stain Dapi (blue).

The two negative controls are <u>ab192252</u> at 1/100 dilution followed by Goat anti mouse lgG (Alexa Fluor®488) secondary antibody at 1/200 dilution.



Western blot - Anti-Jarid2 antibody [EPR6357(2)] - BSA and Azide free (ab251123)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab192252).

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

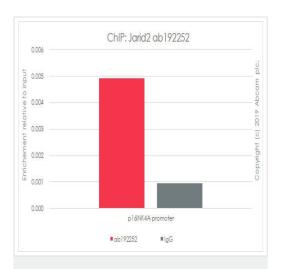
Lane 2: JARID2 (KO) knockout HAP1 whole cell lysate (20 µg)

Lane 3: SH-SY5Y whole cell lysate (20 µg)

Lane 4: U87MG whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - <u>ab192252</u> observed at 138 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

ab192252 was shown to specifically recognize JARID2 in wild-type HAP1 cells along with additional cross reactive bands. No band was observed when JARID2 knockout samples were examined. Wild-type and JARID2 knockout samples were subjected to SDS-PAGE. Ab192252 and ab8245 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



ChIP - Anti-Jarid2 antibody [EPR6357(2)] - BSA and Azide free (ab251123)

Chromatin was prepared from HeLa cells according to the Abcam Dual X-ChIP protocol*. Cells were fixed with EGS for 30 minutes, then formaldehyde for 10 minutes.

The ChIP was performed with 25 μ g of chromatin, 5 μ g of ab192252 (red), and 20 μ l of Protein A/G sepharose beads. 5 μ g of rabbit normal lgG was added to the beads control (gray). The immunoprecipitated DNA was quantified by real time PCR (Sybr green approach).

Primers and probes are located in the first kb of the transcribed region.

*http://www.abcam.com/resources? keywords=X%20ChIP%20protocol

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab192252).



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