

Datasheet for 600-401-CB3

JMJD1A Antibody

Overview

Description:	Anti-JMJD1A (RABBIT) Antibody - 600-401-CB3
Item No.:	600-401-CB3
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The jumonji domain containing 1A protein (JMJD1A) was originally discovered as a testes specific gene, but has been found to be expressed in numerous tissues. JMJD1A is a histone demethylase and specifically demethylates mono- and dimethyl-H3K9. It has also been found to be a novel interaction partner with ER71, a transcription factor expressed in the testes of adult mice and during embryogenesis. JMJD1A is also a downstream gene of STAT3, a protein that has been found to be important in the maintenance of mouse embryonic stem (mES) cells, and decreased JMJD1A expression correlated with the differentiation of cultured mES cells following the removal of the cytokine LIF. These findings suggest that JMJD1A might be a critical signaling molecule underlying the maintenance of pluripotency in embryonic stem cells. At least two isoforms of JMJD1A are known to exist.
Synonyms:	JMJD1A Antibody, TSGA, JMJD1, JHDM2A, JHMD2A, JMJD1A, KIAA0742, TSGA, Lysine-specific demethylase 3A, JmjC domain-containing histone demethylation protein 2A
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	KDM3A
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen: Anti-JMJD1A antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the N-terminus of human JMJD1A.

Purity/Specificity: Anti-JMJD1A Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody will not cross-react with JMJD1B or JMJD1C.

Relevant Links:

- [UniProtKB - Q9Y4C1](#)
- [GeneID - 55818](#)
- [NCBI - NP_060903](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-JMJD1A Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 148 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:10,000 - 1:20,000

IF: 20 µg/mL

IHC: 5 µg/mL

WB: 1-2 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

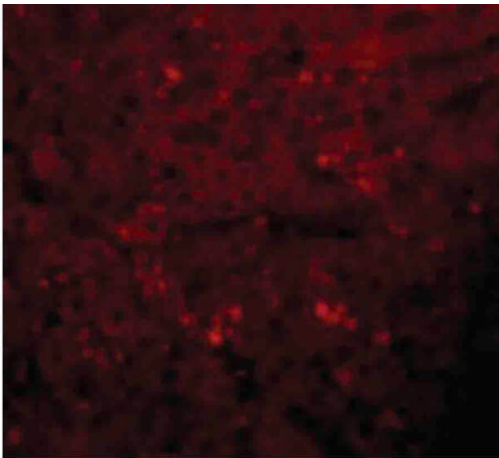
Stabilizer: None

Shipping & Handling

Shipping Condition: Dry Ice

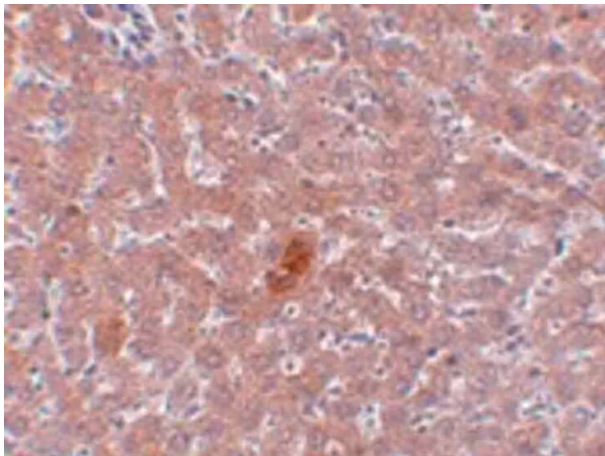
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



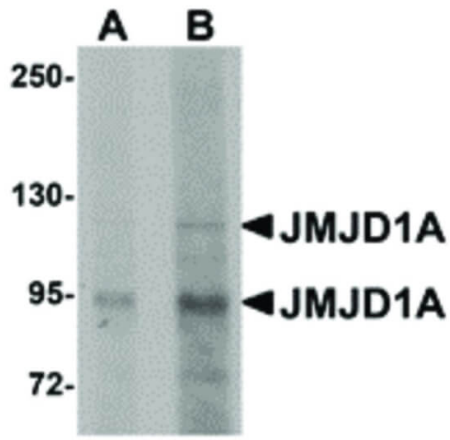
Immunofluorescence Microscopy

Immunofluorescence Microscopy of JMJD1A antibody.
Tissue: rat liver cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: JMJD1A antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT.
Localization: JMJD1A is nuclear and cytoplasmic. Staining: JMJD1A as red fluorescent signal.



Immunohistochemistry

Immunohistochemistry of JMJD1A antibody. Tissue: rat liver tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: JMJD1A antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: JMJD1A is nuclear and cytoplasmic. Staining: JMJD1A as precipitated brown signal with purple nuclear counterstain.

**Western Blot**

Western Blot of JMJD1A antibody. Lane 1: mouse liver tissue lysate with JMJD1A antibody at 1 $\mu\text{g}/\text{mL}$. Lane 2: mouse liver tissue lysate with JMJD1A antibody at 2 $\mu\text{g}/\text{mL}$. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 148 kDa, 95 kDa for JMJD1A. Other band(s): JMJD1A splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.