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Datasheet for 600-401-CB8

JMJD3 Antibody

Overview

Description:	Anti-JMJD3 (RABBIT) Antibody - 600-401-CB8
Item No.:	600-401-CB8
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The Jumonji domain-containing protein 3 (JMJD3) functions as a trimethylation-specific demethylase, converting the trimethylated histone H3 Lys27 residue to the dimethylated form, and is thought to also function as a transcriptional repressor. JMJD3 plays a central role in regulation of posterior development, by regulating HOX gene expression. It is involved in inflammatory response by participating in macrophage differentiation in case of inflammation by regulating gene expression and macrophage differentiation. JMJD3 can also interact with and demethylate p53, resulting in its stabilization and localization to the nucleus in mouse embryo fibroblasts during neural stem cell differentiation.
Synonyms:	JMJD3 Antibody, JMJD3, JMJD3, KIAA0346, Lysine-specific demethylase 6B, JmjC domain-containing protein 3
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	KDM6B
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-JMJD3 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 JMJD3.
Purity/Specificity:	Anti-JMJD3 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific for JMJD3 and will not recognize other JMJD proteins.
Relevant Links:	• UniProtKB - O15054 • GeneID - 23135 • NCBI - EAW90126

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-JMJD3 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 177 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:	1:5,000
IF:	5 µg/mL
WB:	0.5 µg/mL

Formulation

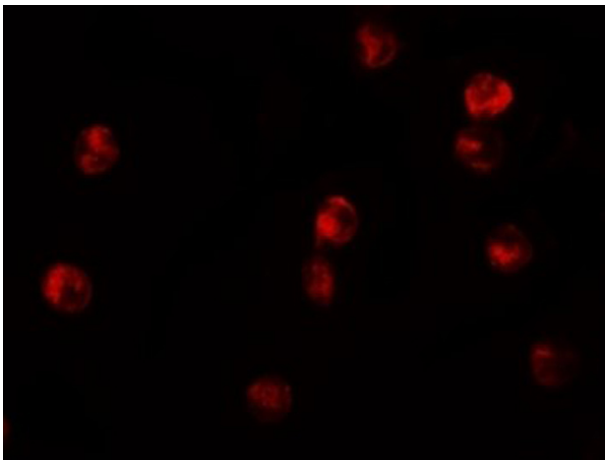
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

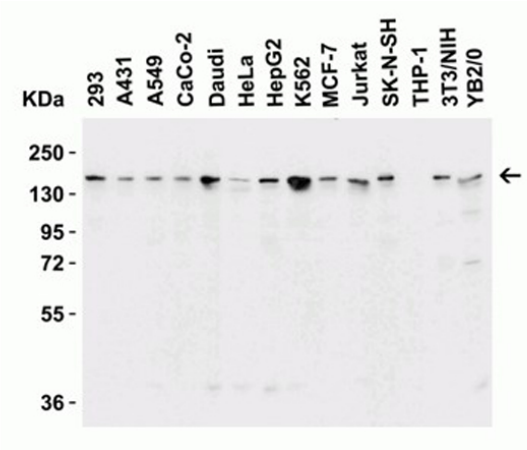
Shipping Condition:	Dry Ice

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.

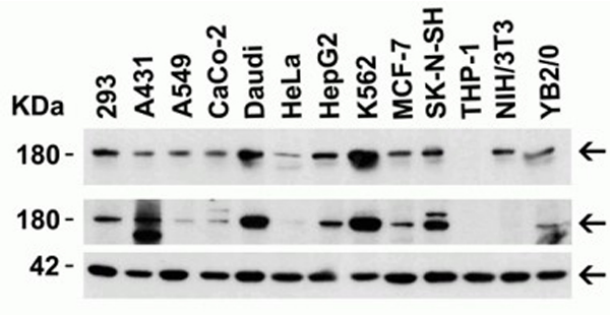
Images



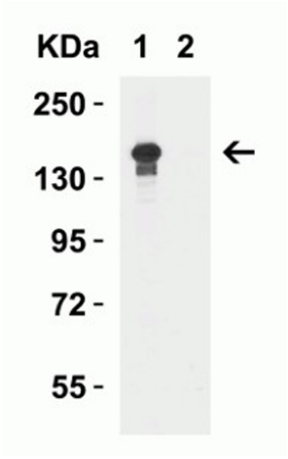
Immunofluorescence Microscopy
Immunofluorescence of JMJD3.
Cell: K562 Cells.
Fixation: 4% paraformaldehyde-fixed.
Primary Antibody: JMJD3 at 20 µg/mL.
Sencondary: goat anti-rabbit IgG antibody at 1:500 dilution (red).



Western Blot
Western Blot Validation of JMJD3.
Load: 15µg of Human, Mouse, or Rat Cell Line lysates per lane.
Primary Antibody: JMJD3 at 1 µg/mL for 1h incubation at RT in 5% NFDM/TBST.
Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.

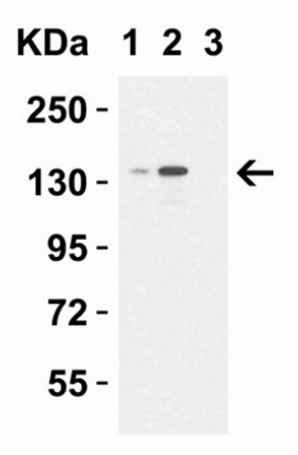


Western Blot
Western Blot of JMJD3.
Load: 15 µg of lysates per lane.
Primary Antibody: Top: JMJD3 (p/n 600-401-CB8) at 1 µg/mL, Middle: JMJD3 at 2 µg/mL, and Bottom: beta-actin at 1 µg/mL for 1h incubation at RT in 5% NFDM/TBST.
Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot
Western Blot of JMJD3.
Load: 15 µg of K562 Cell Lysate per lane.
Lane 1: in the absence of blocking peptide, Lane 2: in the presence of blocking peptide.
Primary Antibody: JMJD3 at 0.5 µg/mL for 1h incubation at RT in 5% NFDM/TBST.
Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.

Western Blot
Western Blot of JMJD3.
Load: 15 µg of mouse A-20 lysates per lane.
Lane 1: in the absence of blocking peptide, Lane 2: in the presence of blocking peptide.
Primary Antibody: JMJD3 at 0.5 µg/mL for 1h incubation at RT in 5% NFDM/TBST.
Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot
Western Blot of JMJD3.
Load: 15 µg of HepG2 lysates per lane.
Primary Antibody: JMJD3 at (Lane 1: 0.25µg/mL in the absence of blocking peptide, Lane 2: 0.5µg/mL in the absence of blocking peptide, and Lane 3: 0.25µg/mL in the presence of blocking peptide) for 1h incubation at RT in 5% NFDM/TBST.
Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.

Immunocytochemistry
Immunocytochemistry of JMJD3.
Cell: K562 Cells.
Fixation: fixed with formaldehyde and blocked with 10% serum for 1 h at RT.
Antigen Retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-JMJD3 antibody at 2.5 µg/ml overnight at 4°C.
Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250.
Counter stained with Hematoxylin.

References

- Chen Q et al. BMSC-EVs regulate Th17 cell differentiation in UC via H3K27me3. *Mol Immunol.* (2020)

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