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For Research Use Only. Not for use in diagnostic procedures.



Anti-Jmjd1c (Mouse) mAb

CODE No.	D356-3			
CLONALITY	Monoclonal			
CLONE	13B			
ISOTYPE	Mouse IgG1 κ			
QUANTITY	$100 \ \mu L$, $1 \ mg/mL$			
SOURCE	Purified IgG from mouse ascites fluid			
IMMUNOGEN His-tagged Jmjd1c fusion protein corresponding to 245-453 amino acids				
FORMULATION PBS containing 50% Glycerol (pH 7.2). No preservative is contained.				
STORAGE This antibody solution is stable for one year from the date of purchase when st				

APPLICATIONS-CONFIRMED

Western blotting 1 µg/mL

Immunohistochemistry 5 µg/mL

Heat treatment for paraffin embedded section: Microwave oven; 2 times for 10 min. each in 10 mM citrate buffer (pH 6.2)

SPECIES CROSS REACTIVITY on WB

Species	Human	Mouse	Rat	Hamster
Sample	Not tested	NIH/3T3, MEF	Not tested	Not tested
Reactivity		+		

Entrez Gene ID 108829 (Mouse)

REFERENCE 1) Kuroki, S., *et al.*, *Biol. Reprod.* **89**, 93 (2013)

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The descriptions of the following protocols are examples. Each user should determine the appropriate condition.

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SDS-PAGE & Western blotting

- 1) Wash 1 x 10^7 cells 3 times with PBS and suspend them in 1 mL of Laemmli's sample buffer, then sonicate briefly (up to 10 sec.).
- 2) Boil the sample for 2 min. and centrifuge. Load 10 µL of the sample per lane in a 1-mm-thick SDS-polyacrylamide gel (5% acrylamide) for electrophoresis.
- 3) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm² for 75 min. in a semi-dry transfer system (Transfer Buffer: 25 mM Tris, 190 mM glycine, 20% MeOH). See the manufacturer's manual for precise transfer procedure.
- 4) To reduce nonspecific binding, soak the membrane in 10% skimmed milk (in PBS, pH 7.2) overnight at 4°C.
- 5) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (5 min. x 3 times).
- 6) Incubate the membrane with primary antibody diluted with 1% skimmed milk (in PBS, pH 7.2) as suggested in the **APPLICATION** for 1 hr. at room temperature. (The concentration of antibody will depend on the conditions.)
- 7) Wash the membrane with PBS-T (5 min. x 3 times).
- 8) Incubate the membrane with the 1:10,000 Anti-IgG (Mouse) pAb-HRP (MBL; code no. 330) diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hr. at room temperature.
- 9) Wash the membrane with PBS-T (5 min. x 3 times).
- 10) Wipe excess buffer on the membrane, then incubate it with appropriate chemiluminescence reagent for 1 min. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in a plastic wrap.
- 11) Expose to an X-ray film in a dark room for 5 min. Develop the film as usual. The condition for exposure and development may vary.

(Positive controls for Western blotting; NIH/3T3 and MEF)



Western blot analysis of mouse Jmjd1c

Lane 1: NIH/3T3 Lane 2: MEF

Immunoblotted with Anti-Jmjd1c (Mouse) mAb (D356-3)

Immunohistochemical staining for formalin fixed paraffin-embedded section

- 1) Deparaffinize the sections with Xylene 3 times for 5 min. each.
- 2) Wash the slides with Ethanol 3 times for 5 min. each.
- 3) Wash the slides with PBS 3 times for 5 min. each.
- 4) Remove the slides from PBS and heat-treated with 10 mM Citrate buffer (pH 6.2) 2 times for 10 min. using microwave oven.
- 5) Let the slides cool down at room temperature in the Citrate buffer.
- 6) Remove the slides from the Citrate buffer and block endogenous peroxidase with 3% H₂O₂ in PBS for 10 min.
- 7) Wash the slides with PBS 2 times for 5 min. each.
- 8) Remove the slides from PBS, wipe gently around each section and cover tissues with blocking buffer (20 mM HEPES, 1% BSA, 135 mM NaCl) for 5 min. at room temperature (20~25°C) to block non-specific staining. Do not wash.
- 9) Tip off the blocking buffer, wipe gently around each section and cover tissues with primary antibody diluted with 1% BSA/PBS as suggested in the **APPLICATIONS** for 1 hr. at 4°C. (The concentration of antibody will depend on the conditions.)
- 10) Wash the slides 3 times in PBS for 5 min. each.
- 11) Wipe gently around each section and cover tissues with Histostar (Ms + Rb) (MBL; code no. 8460). Incubate for 1 hr. at room temperature.
- 12) Wash the slides 3 times in PBS for 5 min. each.
- 13) Visualize by reacting for 5 min. with Histostar DAB (MBL; code no. 8469) at room temperature. *DAB is a suspect carcinogen and must be handled with care. Always wear gloves.
- 14) Wash the slides in water for 5 min.
- 15) Counter stain in hematoxylin for 1 min., wash the slides 3 times in water for 5 min. each, and then immerse the slides in PBS for 5 min.
- 16) Dehydrate by immersing in Ethanol 3 times for 3 min. each, followed by immersing in Xylene 3 times for 3 min. each. Now ready for mounting.

(Positive control for Immunohistochemistry; Mouse intestinal tract)



Immunohistochemical detection of Jmjd1c in mouse intestinal tract Brown: Anti-Jmjd1c (Mouse) mAb (D356-3) Blue: Hematoxylin