Product Datasheet

Lysine (K)-specific Demethylase 4A/KDM4A/JMJD2A Antibody - BSA Free NBP1-49602

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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NBP1-49602

Lysine (K)-specific Demethylase 4A/KDM4A/JMJD2A Antibody - BSA Free

Lysine (K)-specific Demethylase 4A/KDM4A/JMJD2A Antibody - BSA Free	
Product Information	
Unit Size	0.1 ml
Concentration	0.53 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS and 30% Glycerol
Product Description	
Host	Rabbit
Gene ID	9682
Gene Symbol	KDM4A
Species	Human, Mouse
Immunogen	A genomic peptide made to an internal region of the human JMJD2A protein (within residues 320-460). [Swiss-Prot O75164]
Notes	Manufactured by Genomic Antibody Technology™. GAT <u>FAQs</u>
Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:25000, Simple Western 1:500, Immunohistochemistry 1:50, Immunocytochemistry/Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:50
Application Notes	This JMJD2A antibody is useful for Immunohistochemistry on paraffin tissues, Immunocytochemistry/Immunofluorescence and Western blot where a band is seen ~119 kDa. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. In Simple Western only 10 - 15 uL of the recommended dilution is used per data
	point. Separated by Size-Wes, Sally Sue/Peggy Sue.

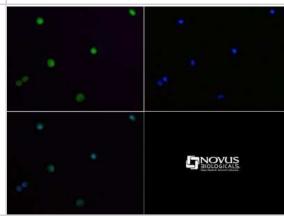


Images

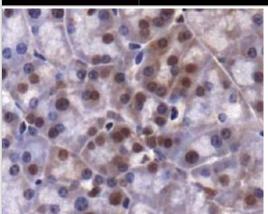
Western Blot: Lysine (K)-specific Demethylase 4A/KDM4A/JMJD2A Antibody [NBP1-49602] - Analysis of JMJDA in HeLa nuclear extracts.

<u>kDa</u> 191 - **■ JMJD2A** 97 -64 -51 -39 -28 -19 -

Immunocytochemistry/Immunofluorescence: Lysine (K)-specific Demethylase 4A/KDM4A/JMJD2A Antibody [NBP1-49602] - Antibody was tested at 1:50 in HeLa cells with FITC (green). Nuclei (Blue) were counterstained with Dapi (blue).



Immunohistochemistry: Lysine (K)-specific Demethylase 4A/KDM4A/JMJD2A Antibody [NBP1-49602] - Staining of JMJD2A in paraffin embedded mouse pancreas.



Simple Western: Lysine (K)-specific Demethylase 4A/KDM4A/JMJD2A Antibody [NBP1-49602] - Simple Western lane view shows a specific band for JMJD2A in 0.5 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



14 -

Procedures

Western Blot protocol for JMJD2A Antibody (NBP1-49602)

Lysine (K)-specific Demethylase 4A/KDM4A/JMJD2A Antibody: https://www.novusbio.com/products/lysine-k-specific-demethylase-4a-kdm4a-jmjd2a-antibody_nbp1-49602

Western Blot Protocol

- 1. Perform SDS-PAGE on samples to be analyzed, loading 40 ug of total protein per lane.
- 2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
- 3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
- 4. Rinse the blot.
- 5. Block the membrane using standard blocking buffer for at least 1 hour.
- 6. Wash the membrane in wash buffer three times for 10 minutes each.
- 7. Dilute the rabbit anti-JMJD2A primary antibody (NBP1-49602) in blocking buffer and incubate 1 hour at room temperature.
- 8. Wash the membrane in wash buffer three times for 10 minutes each.
- 9. Apply diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
- 10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
- 11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

*Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

Immunohistochemistry-Paraffin protocol for JMJD2A Antibody (NBP1-49602)

Lysine (K)-specific Demethylase 4A/KDM4A/JMJD2A Antibody: https://www.novusbio.com/products/lysine-k-specific-demethylase-4a-kdm4a-jmjd2a-antibody_nbp1-49602

Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:

- 1. Wash sections in deionized water three times for 5 minutes each.
- 2. Wash sections in wash buffer for 5 minutes.
- 3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
- 4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4C.
- 5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
- 6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
- 7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
- 8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
- 9. Wash sections three times in wash buffer for 5 minutes each.
- 10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
- 11. As soon as the sections develop, immerse slides in deionized water.
- 12. Counterstain sections in hematoxylin.
- 13. Wash sections in deionized water two times for 5 minutes each.
- 14. Dehydrate sections.
- 15. Mount coverslips.



Immunocytochemistry/Immunofluorescence Protocol for JMJD2A Antibody (NBP1-49602)

Lysine (K)-specific Demethylase 4A/KDM4A/JMJD2A Antibody: https://www.novusbio.com/products/lysine-k-specific-demethylase-4a-kdm4a-jmjd2a-antibody_nbp1-49602 Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

- 1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
- 2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
- 3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
- 4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
- 5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
- Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
- 7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
- 8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,0000 and incubate for 10 minutes. Wash a third time for 10 minutes.
- 9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.
- *The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.





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Products Related to NBP1-49602

NB800-PC9 HeLa Nuclear Cell Lysate

HAF008 Goat anti-Rabbit IgG Secondary Antibody [HRP]

NB7160 Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]

NBP2-24891 Rabbit IgG Isotype Control

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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