Detection of HDAC1 in Formalin-Fixed, Paraffin-Embedded Mouse Tissue

Reagent and Antibody Information

1X Wash Buffer 3% Hydrogen Peroxide 1% BSA Diluent 1X Citrate Buffer DAB Chromagen Hematoxylin

<u>Blocking Serum: Normal Donkey Serum</u> Jackson Immunoresearch Laboratories, Inc. West Grove, PA 19390 <u>www.jacksonimmuno.com</u> 1-800-367-5296 Catalog # 017-000-011

Avidin / Biotin Blocking Kit Vector Laboratories, Inc. Burlingame, CA 94010 <u>www.vectorlabs.com</u> 1-800-227-6666 Catalog # SP-2001

Primary Antibody (1): Rabbit Polyclonal HDAC1 Antibody Sigma-Aldrich St. Louis, MO www.sigmaaldrich.com 1-800-325-3010 Catalog # H3284

Primary Antibody (2): Rabbit Polyclonal to HDAC1 Abcam, Inc Cambridge, MA 02139 www.abcam.com 1-888-772-2226 Catalog # ab19845-100

Note: Either primary antibody 1 or 2 can be used for this stain. Be sure to use the same antibody throughout the entire project.

Negative Control Serum: Normal Rabbit Serum Jackson Immunoresearch Laboratories, Inc. West Grove, PA 19390 www.jacksonimmuno.com 1-800-367-5296 Catalog # 011-000-001

<u>Secondary Antibody: Donkey Anti-Rabbitt IgG (H+L) Biotin-SP-Conjugated</u> Jackson Immunoresearch Laboratories, Inc. West Grove, PA 19390 <u>www.jacksonimmuno.com</u> 1-800-367-5296 Catalog # 711-065-152

Label Complex: Peroxidase-Conjugated Streptavidin SS Label Biogenex Laboratories San Ramon, CA 94583 www.biogenex.com 1-800-421-4149 Catalog # HK330-9K

Staining Procedure

Positive Control Tissue: Papilloma skin Stain Localization: Nuclear

1. Deparaffinize and hydrate slides through the following solutions:

Solution	Repetitions	Time
Xylene	2 times	5 minutes
100% Ethanol	2 times	3 minutes
95% Ethanol	2 times	3 minutes
1X Wash Buffer	2 times	5 minutes

2. Quench endogenous peroxidase by placing the slides in 3% hydrogen peroxide for 15 minutes.

3. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.

4. <u>Heat-Induced Epitope Retrieval Using The Decloaker</u> Add 500 ml of distilled water to the pan inside the decloaker. Place a full rack of slides into a Tissue Tek® container with 200 ml of 1X citrate buffer (Insert blank slides into any empty slots in the rack to ensure even heating of slides) Place the container stably inside the pan and decloak for 5 minutes. *Maximum Pressure* ______ Depressurize for 10 minutes. Remove pan top and cool for 10 minutes. *Temperature Before Cooling Slides*______

Rinse the slides in 2 changes of distilled water for 3 minutes each time.

- 5. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each time.
- 6. Block with 10% Normal Donkey Serum for 20 minutes at room temperature. Lot #_____ Date Reconstituted______

DO NOT RINSE SLIDES. CONTINUE TO AVIDIN-BIOTIN BLOCK.

7. Avidin / Biotin Blocking Kit

Lot #_____ Exp Date_____ New Kit: yes / no Apply avidin block for 15 minutes at room temperature. Quick rinse in 1X Wash Buffer. Apply biotin block for 15 minutes at room temperature.

DO NOT RINSE SECTIONS WITH BUFFER BEFORE ADDING PRIMARY ANTIBODY. ONLY WIPE EXCESS BLOCK.

8. Apply primary antibody at a 1:1000 dilution, and incubate for 1 hour at room temperature. Lot #_____ Exp Date _____

For negative control slides, dilute the protein concentration of the normal rabbit serum to match the protein concentration of the primary antibody. Make a 1:1000 dilution from this normalized serum, and apply to the slides. Incubate for 1 hour at room temperature. Lot #_____ Date Reconstituted_____

- 9. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.
- 10. Apply the donkey anti-rabbit secondary antibody at a 1:1000 dilution, and incubate for 30 minutes at room temperature. Lot #_____ Date Reconstituted _____

- 11. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.
- 12. Apply the Streptavidin SS Label, and incubate for 30 minutes at room temperature. Lot #_____ Exp. Date _____
- 13. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.
- 14. Apply the DAB chromagen, and incubate in the dark for 6 minutes at room temperature. (Add 1 drop of DAB per ml of substrate) Lot #_____ Exp. Date_____ New Kit: yes / no
- 15. Rinse the slides in tap water 3 minutes.
- 16. Counterstain with Harris Hematoxylin for 20 seconds.
- 17. Rinse the slides in tap water until water is clear.
- 18. Gently agitate slides in 1X Wash Buffer until they turn blue.

19. Dehydrate through the following solutions:

Solutions	Repetitions	Time
95% Ethanol	1 time	3 minutes
100% Ethanol	3 times	3 minutes
Xylene	2 times	5 minutes

20. Coverslip

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