Detection of Amylase in Formalin-Fixed, Paraffin-Embedded Rat Tissue

Reagent and Antibody Information

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

Staining Kit: Goat ABC Staining System Santa Cruz Biotechnology, Inc. Santa Cruz, CA 95060 www.scbt.com 1-800-457-3801 Catalog # sc-2023

Note: This kit contains all reagents necessary to make the blocking solution, secondary antibody, and label complex.

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

Primary Antibody: Goat Anti-Amylase (C-20) Polyclonal Antibody Santa Cruz Biotechnology, Inc. Santa Cruz, CA 95060 www.scbt.com 1-800-457-3801 Catalog # sc-1511

<u>Negative Serum Control: Normal Goat Serum</u> Jackson Immunoresearch Laboratories, Inc. West Grove, PA 19390 <u>www.jacksonimmuno.com</u> 1-800-367-5296 Catalog # 005-000-121

Staining Procedure

Positive Control Tissue: Acinar cells of pancreas Stain Localization: Cytoplasmic

1. Deparaffinize and hydrate slides through the following solutions:

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 Microwave</u> 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) Microwave for 5 minutes at power level 5. Cool for 1 minute. (Add more citrate buffer, if necessary.) Microwave again for 5 minutes at power level 5. *Temperature Before Cooling Slides* Cool 20 minutes at room temperature. 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.

Goat ABC Staining Kit Lot #_____ Exp. Date (1 year from received date) _____

6. Apply the blocking reagent from the Goat Staining Kit for 1 hour at room temperature. (Made with 75 μ l donkey serum (blue cap) and 5 ml diluent)

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

7. <u>Avidin / Biotin Blocking Kit</u> Lot #_____ Exp. Date_____New Kit: yes / no Apply avidin block - 15 minutes at room temperature. Quick rinse in 1X Wash Buffer. Apply biotin block - 15 minutes at room temperature.

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

8. Apply the primary antibody at a 1:100 dilution and incubate for 1 hour at room temperature. Lot #_____ Exp. Date_____ For negative control slides, dilute the protein concentration of the normal goat serum to match that of the primary antibody. Make a 1:100 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.
- Apply the secondary antibody from the Goat Staining Kit and incubate for 30 minutes at room temperature. (Made with 75 μl donkey serum, 25 μl of donkey anti-goat IgG (green cap), and 5 ml diluent)
- 11. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.
- Apply the label complex from the Goat Staining Kit and incubate for 30 minutes at room temperature. (Made with 50 μl reagent A (white cap), 50 μl reagent B (purple cap), and 2.5 ml diluent)
- 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 30 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:

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

20. Coverslip

Updated 10/12/05