# Detection of Thyroglobulin in Formalin-Fixed, Paraffin-Embedded in Rat Tissue

## **Reagents:**

1X Automation Buffer
3% Hydrogen Peroxide
Antibody Diluent
Citrate Buffer
DAB Chromagen
Hematoxylin

#### **Antibody Information**

Kit: Vector Mouse Elite Kit Vector Laboratories, Inc. Burlingame, CA 94010 www.vectorlabs.com 1-800-227-6666

1-800-227-6666 Catalog: PK6102

\*This kit includes reagents needed to make blocking reagent, secondary and label antibodies.

# Avidin Biotin Blocking Kit

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

Primary antibody: Mouse anti-thyroglobulin

Neomarkers Fremont, CA www.neomarkers.com Catalog# MS-1380-P

Negative Control: Normal Mouse Serum
Jackson Immunoresearch Laboratories, Inc.
West Grove, PA 19390
www.jacksonimmuno.com
1-800-367-5296
Catalog #015-000-001

## **Staining Procedure**

-Positive Control Tissue: rat GI (colon) -Stain Localization: Cytoplasminc

Deparaffinize and hydrate slides through the following solutions.

Xylene	2 times	5 minutes
100% EtOH	2 times	3 minutes
95% EtOH	2 times	3 minutes
1X Automation Buffer	2 times	5 minutes

- 1. Quench endogenous peroxidase by placing slides in 3% hydrogen peroxide for 15 minutes.
- 2. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.

4. Apply Avidin/Biotin block  Lot# Exp Date New Kit: yes no  Apply avidin block - 15 min at RT.  Quick rinse in 1X AB.  Apply biotin block - 15 min at RT.	locking solution from the Vector Mouse Elite kit and incubate for 20 minutes New Kit: yes / no
Apply blotin block - 15 min at RT.	Exp Date New Kit: yes no n block - 15 min at RT. in 1X AB.
• •	1010CK - 13 mm at K1.

Wipe excess reagent from around tissue section. DO NOT RINSE SECTIONS WITH BUFFER.

5.	Apply primary	antibody (thyroglob	oulin) at 1:100	dilution an	d incubate f	or 30	min.
Lot	#	Exp					

For the negative control slides, normalize the protein concentration of the normal mouse serum to the protein concentration of the primary antibody (thyroglobulin). Use this to make the 1:100 dilution and incubate for 30 min.

Lot #	Reconstituted Date

- 6. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.
- 7. Apply secondary antibody from the Mouse Elite Kit and incubate for 30 minutes.

- 8. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.
- 9. Apply Label antibody from Vector Mouse Elite Kit and incubate for 30 minutes. (Prepare at least 30 mins prior to use)
- 10. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.

11. Apply liquid Dako DAB Chromagen for 6 minutes in the dark.					
(Add 1 drop of DAB pe	er ml of substrate)				
Lot #	Exp. Date	New	kit	yes /	no

- 12. Rinse in tap water 3 minutes.
- 13. Counterstain with Modified Harris Hematoxylin for 30 seconds.
- 14. Rinse in tap water until water is clear.
- 15. Place slides in 1X Automation Buffer for 1 minute with gentle agitation to blue slides.
- 16. Dehydrate through the following solutions.

95% Ethanol	1 change	3 minutes
100% EtOH	3 changes	3 minutes
Xylene	2 changes	5 minutes

17. Coverslip

updated 03/17/04