## Detection of CD25 in Formalin-Fixed, Paraffin-Embedded Human Tissue

## **Reagent and Antibody Information**

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

Staining Kit: Vectastain Elite ABC Kit (Mouse IgG) Vector Laboratories, Inc. Burlingame, CA 94010 www.vectorlabs.com 1-800-227-6666 Catalog # PK-6102

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

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

Primary Antibody: Mouse Monoclonal Antibody To CD25 / IL-2Rα Ab-4 (Clone 4C9) Lab Vision / Thermo Fisher Scientific Fremont, CA 94539 www.labvision.com 1-800-828-1628 Catalog # MS-1088-S0

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

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: Tonsil Stain Localization: Cell membrane of activated T-cells

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 for 5 minutes at power level 5. *Temp after Microwaving*\_\_\_\_\_\_ Cool 20 minutes at room temperature.

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

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

Vectastain Mouse Elite Staining Kit Exp Date\_\_\_\_\_ New Kit: yes / no

6. Apply the block from the Mouse Elite Kit and incubate for 20 minutes at room temperature.

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 primary antibody at a 1:10 dilution and incubate for 1 hour at room temperature. Lot #\_\_\_\_\_ Exp Date \_\_\_\_\_ For negative control slides, dilute the protein concentration of the mouse IgG1 serum to match that of the primary antibody, if necessary. Make a 1:10 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 secondary antibody from Mouse Elite Kit and incubate for 30 minutes at room temperature.
- 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 for 6 minutes in the dark. (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 12/19/06