# 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 Chromogen
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

## Negative Control Serum: Purified Mouse IgG1 Isotype Control Serum

BD Biosciences San Jose, CA 95131 www.bdbiosciences.com 1-855-236-2772 Catalog # 557273

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 – Activated T-cells

Stain Localization: Cell membrane

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.

1	Heat Induced Enitors Detrieval Heiner The Missesses
4.	Heat-Induced Epitope Retrieval Using The Microwave
	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. <i>Temp after Microwaving</i>
	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. Incubate for 20 minutes at room temperature.
	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 SLIDES WITH BUFFER BEFORE ADDING PRIMARY ANTIBODY. ONLY WIPE EXCESS BLOCK.
8	. Apply primary antibody at a 1:10 dilution. Incubate for 1 hour at room temperature.  Lot # Exp. Date

For negative control slides, dilute mouse IgG1 control serum so that it's IgG1 protein concentration matches that of the primary antibody (if necessary). Then make a 1:10 dilution. If the concentrations

Apply the negative and incubate for 1 hour at room temperature.		
Lot # Exp. Date		
9. Rinse the slides in 2 changes of 1X wash buffer for 5 minutes each.		
10. Apply the secondary antibody from Mouse Elite Kit. 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. 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 chromogen. 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 hematoxylin for 20 seconds.		
17. Rinse the slides in tap water until water is clear.		
8. Gently agitate slides in 1X wash buffer until the tissues 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

Updated 12/19/06