Detection of NFkB p65 in Formalin-Fixed, Paraffin-Embedded Mouse Tissue

Reagent and Antibody Information

1X Wash Buffer 3% Hydrogen Peroxide 1% BSA Diluent 1X Citrate Buffer Normal Rabbit IgG – Affinity Purified DAB Chromogen Hematoxylin

<u>Blocking Serum: Normal Donkey Serum</u> Jackson Immunoresearch Laboratories, Inc. West Grove, PA 19390 www.jacksonimmuno.com 1-800-367-5296 Catalog # 017-000-001

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

Primary Antibody: Rabbit Polyclonal Anti-NFkB p65 Antibody – ChIP Grade Abcam, Inc Cambridge, MA 02139 www.abcam.com 1-888-772-2226 Catalog # ab7970 Lot # GR63206-4

Secondary Antibody: Biotin-Conjugated Donkey Anti-Rabbit IgG Jackson Immunoresearch Laboratories, Inc. West Grove, PA 19390 www.jacksonimmuno.com 1-800-367-5296 Catalog # 711-065-152

Label Complex: R.T.U. Vectastain Elite ABC Reagent

Vector Laboratories, Inc. Burlingame, CA 94010 www.vectorlabs.com 1-800-227-6666 Catalog # PK-7100

Staining Procedure

Positive Control Tissue: LPS or ovalbumin lung with high inflammation Stain Localization: Cytoplasmic and 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 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.
- 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. <u>Avidin / Biotin Blocking Kit</u>

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 1:1500 dilution. Incubate for 1 hour at room temperature. Lot #_____ Exp. Date _____

For negative control slides, dilute normal rabbit IgG so that it's IgG protein concentration matches that of the primary antibody (if necessary). Then make a 1:1500 dilution. If the concentrations can't be matched using this method, the dilution for the negative reagent may need to be adjusted. 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 donkey anti-rabbit secondary antibody at a 1:500 dilution. 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 Vectastain R.T.U. Elite Label and incubate for 30 minutes at room temperature. Exp. Date_____ New Kit: yes / no
- 13. Rinse the slides in 2 changes of 1X wash buffer for 5 minutes each time.
- 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.
- 18. 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 10/18/13