Detection of Calbindin-D-28K in Formalin-Fixed, Paraffin-Embedded Mouse Tissue

Reagent and Antibody Information

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

Blocking Solution: Dakocytomation Protein Block Serum-Free Ready-To-Use

Dakocytomation Corporation Carpinteria CA 93013 www.dakousa.com 1-800-235-5763

Code No. X0909

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

Primary Antibody: Rabbit Polyclonal Calbindin-D-28K (KD-15) Antibody

Chemicon International Temecula CA, 92590 www.chemicon.com 1-800-437-7500 Catalog # AB1778

Negative Control Serum: Normal Rabbit Serum Jackson Immunoresearch Laboratories, Inc. West Grove, PA 19390 www.jacksonimmuno.com 1-800-367-5296 Catalog # 011-000-001

Staining Kit: LSAB+ System-HRP
Dakocytomation Corporation
Carpinteria CA 93013
www.dakousa.com
1-800-235-5763
Code No. K0690

Note: This kit includes reagents needed for the secondary antibody (link) and label complex.

Staining Procedure

Positive Control Tissue: Mouse brain 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. | . Heat-Induced Epitope Retrieval Using The Decloaker | | | |
|----|---|--|--|--|
| | Add 500 ml of distilled water to the pan inside the decloaker. | | | |
| | 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) | | | |
| | Place the container stably inside the pan and decloak for 5 minutes. <i>Maximum Pressure</i> | | | |
| | Depressurize for 10 minutes. | | | |
| | Remove pan top and cool for 10 minutes. <i>Temperature Before Cooling Slides</i> | | | |
| | 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. | | | |
| | Block with the Dako Protein Blocking Reagent and incubate for 10 minutes at room temperature. Lot # Exp Date | | | |
| | DO NOT RINSE THE SLIDES. CONTINUE TO AVIDIN-BIOTIN BLOCK. | | | |
| 7. | Avidin / Biotin Blocking Kit | | | |
| | 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 1:750 dilution and incubate for 1 hour at room temperature. Lot # Date Aliquoted | | | |
| | | | | |

For negative control slides, dilute the protein concentration of the normal rabbit serum to match that of the primary antibody. Make a 1:750 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. | | | |
| LSAB+ Kit Lot # Exp Date | | | |
| 10. Apply the Link (yellow bottle) from the LSAB+ 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 Label (red bottle) from the LSAB+ Kit and incubate for 30 minutes at room temperature. | | | |
| 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 06/09/07