Mucin Mucicarmine Control Slides – Technical Memo

CONTROL SLIDES: | Part 4455A | Part 4455B |
<table>
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<tbody>
<tr>
<td>10 Slide/Set</td>
<td>98 Slide/Set</td>
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PRODUCT SPECIFICATIONS:
- **Tissue:** Positive staining colon.
- **Fixation:** Formalin 10%, Phosphate Buffered (Part 1090).
- **Section/Glass:** Paraffin sections cut at 4 microns on Superfrost™ Plus slides.
- **Quality Control Stain:** Mayer Mucicarmine quality control stained slide(s) included.
- **Reactivity:** Guaranteed product specific reactivity for one year from date of receipt. Revalidate after one year to verify continued reactivity.
- **Storage:** 15-30°C in a light deprived and humidity controlled environment.
- **Intended Use:** To verify histological techniques and reagent reactivity.

Before using unstained control slides, review the enclosed stained slide(s) to ensure that this tissue source is acceptable for testing needs.

CONTROL SLIDE VALIDATION:

**With Mucin, Mayer Mucicarmine Stain Kit:**

<table>
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<tr>
<th>With Part 9151A/B</th>
<th>Individual Stain Solution</th>
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<tbody>
<tr>
<td>Solution A: Ferric Chloride, Aqueous 125/250 ml</td>
<td>Part 1250</td>
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<tr>
<td>Solution B: Hematoxylin 1%, Alcoholic 125/250 ml</td>
<td>Part 1409</td>
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<tr>
<td>Solution C: Mucicarmine Stock Stain, Mayer 125/125 ml</td>
<td>Part 1409</td>
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<tr>
<td>Solution D: Metanil Yellow Stain, Aqueous 250/500 ml</td>
<td>Part 12235</td>
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APPLICATION:

Newcomer Supply Mucin Mucicarmine Control Slides are for the positive histochemical staining of acid epithelial mucins (sialomucin, sulfomucin).

NEWCOMER SUPPLY VALIDATION PROCEDURE:

1. Heat dry sections in oven according to your laboratory protocol.
2. Deparaffinize sections thoroughly in three changes of xylene, 3 minutes each. Hydrate through two changes each of 100% and 95% ethyl alcohols, 10 dips each. Wash well with distilled water.
3. Prepare fresh Weigert Iron Hematoxylin Working Solution directly before use; combine and mix well:
   - a. Solution A: Ferric Chloride, Aqueous 20 ml
   - b. Solution B: Hematoxylin 1%, Alcoholic 20 ml
5. Rinse in running tap water for 10 minutes.
6. Prepare fresh Mayer Mucicarmine Working Solution; combine and mix well:
   - a. Solution C: Mucicarmine Stock Stain, Mayer 10 ml
   - b. Tap Water (do not use distilled water) 30 ml
7. Stain in fresh Mayer Mucicarmine Working Solution for 60 minutes or longer if a more intense stain is desired. **Microwave Modification:** See Procedure Note #3.
   - a. Place slides in a plastic Coplin jar containing fresh Mayer Mucicarmine Working Solution and microwave at 70°C for 10 minutes.
8. Rinse in several changes of tap water.
9. Counterstain in Solution D: Metanil Yellow Stain, Aqueous for 30 to 60 seconds.
10. Dehydrate quickly through 95% and 100% ethyl alcohols. Clear in three changes of xylene, 10 dips each; coverslip with compatible mounting medium.

RESULTS:

| Acid epithelial mucins | Deep rose to red |
| Nuclei                | Black           |
| Other tissue elements | Yellow          |

PROCEDURE NOTES:

1. Drain slides after each step to prevent solution carry over.
2. Do not allow sections to dry out at any point during procedure.
3. The suggested microwave procedure has been tested at Newcomer Supply. This procedure is a guideline and techniques should be developed for use in your laboratory.
4. If using a xylene substitute, closely follow the manufacturer’s recommendations for deparaffinization and clearing steps.

REFERENCES:

4. Modifications developed by Newcomer Supply Laboratory.

SUPPORT/WARRANTY: For assistance regarding this product contact Newcomer Supply at 800-383-7799 or info@newcomersupply.com. The information presented in this technical memo is to the best of our knowledge accurate. No warranty is expressed or implied. The user is responsible for determining the suitability of this product for their use and upon receipt assumes all liability for its use and responsibility for compliance with any laws or regulations. Please refer to www.newcomersupply.com for complete warranty information. © Newcomer Supply, Inc., 2020