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Part 4410
Revised January 2020

Mast Cell Control Slides – Technical Memo

CONTROL SLIDES:

	Part 4410A	**Part 4410B**
	10 Slide/Set	98 Slide/Set

PRODUCT SPECIFICATIONS:
Tissue: Positive staining bladder.
Fixation: Formalin 10%, Phosphate Buffered (Part 1090).
Section/Glass: Paraffin sections cut at 4 microns on Superfrost™ Plus slides.
Quality Control Stain: Toluidine Blue 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 Toluidine Blue Stain for Mast Cells:	**Individual Stain Solution**
Toluidine Blue Stain 0.1%, Aqueous	Part 14027

APPLICATION:

Newcomer Supply Mast Cell Control Slides are for the positive histochemical staining of mast cells, cells filled with basophilic granules associated with inflammation and allergic reactions, which will stain metachromatically with toluidine blue.

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.
   a. *See Procedure Notes #1 and #2.*
3. Place slides in Toluidine Blue Stain 0.1%, Aqueous for 10 minutes.
4. Rinse well in distilled water.
5. Dehydrate quickly through two changes each of 95% and 100% ethyl alcohol. Clear in three changes of xylene, 10 dips each; coverslip with compatible mounting medium.
   a. *See Procedure Note #3.*

RESULTS:

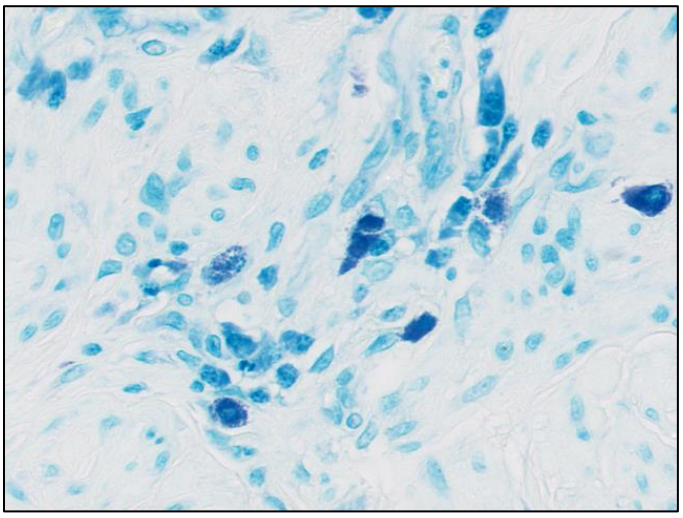
Mast cells	Deep rose-violet
Background	Blue

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. Metachromasia of mast cell granules is stable and will maintain staining during dehydration steps.
4. If using a xylene substitute, closely follow the manufacturer's recommendations for deparaffinization and clearing steps

REFERENCES:

1. Carson, Freida L., and Christa Hladik. *Histotechnology: A Self-Instructional Text*. 3rd ed. Chicago, Ill.: American Society of Clinical Pathologists, 2009.188.
2. Modifications developed by Newcomer Supply Laboratory.



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