## SMITH & ATKINSON'S METHOD FOR MAST CELLS

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of mast cells.	
PRINCIPLE:	Toluidine Blue is a metachromatic dye which overstains the tissue. Mast cells, due to their heparin and histamine content, can withstand an acid wash which decolorizes other tissue components.	
CONTROL:	Skin, mast cell tumor  Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs030.	
SPECIMEN PREPARATION:	Formalin fixed, paraffin embedded sections cut at 6 micrometers	
SOLUTIONS:	<ol> <li>Toluidine Blue 0.25% Alcoholic Item# s2192</li> <li>Acid Alcohol 0.5% Item# s103B</li> <li>Eosin Y 0.01% Alcoholic Item# s2193</li> <li>Solutions can be purchased separately from Poly Scientific.</li> </ol>	
NOTES:		
REFERENCE:	Luna, Lee G. Hi <u>stopathologic Methods and Color Atlas of Special</u> <u>Stains and Tissue Artifacts. Am</u> erican Histolabs Inc. Gaithersburg, MD. 1992. pp. 311-312.	

## STAINING PROCEDURE:

- Deparaffinize slides in 2 changes each of Xylene, Reagent Alcohol, 95% Reagent Alcohol.
- Place slides in Absolute Alcohol and 95% Alcohol, 3 changes for 2 minutes each. 2.
- Stain slides for 1 hour in Toluidine Blue 0.25% Alcoholic. 3.
- After the sections are stained rinse briefly in Acid Alcohol 0.5% to remove excess dye until the sections are grossly colorless.
- Counterstain lightly by dipping in Eosin Y 0.01% Alcoholic. 5.
- Clear slides in Absolute Alcohol and Xylene, 3 changes each for 2 minutes each. 6.
- Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium. 7.

RESULTS:	
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Mast Cells	 Deep Blue-Purple
Cytoplasm	 Pale Pink

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