### Giemsa Stain

**Final Approval:** December 2010  
**Effective:** December 2010  
**Next Review Date:** April 2015

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<th>Stakeholder Name(s):</th>
<th>Date:</th>
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**Purpose/Policy Statement:**

For diagnostic purposes, to demonstrate bone marrow cells and helicobacter.

**Definitions:**
- n/a

### STEPS / KEY POINTS

**PROCEDURE:**

1. Place slide on staining rack over sink. Flood slide with **Optimized Giemsa Buffer** and let stand for 3 minutes.
2. Tip slide rack to drain **Optimized Giemsa Buffer**.
3. Flood slide with **Working Giemsa Stain** and stain for 7-11 minutes for desired stain intensity. (*IMPORTANT:* Agitate liquid every few minutes using air from a pipet to insure proper staining.)
4. Pour **Optimized Giemsa Buffer** over slide until no stain runs off, then allow slide to sit covered in **Optimized Giemsa Buffer** 3 minutes.
5. Tip slide rack to drain **Optimized Giemsa Buffer**.
6. Rinse with **Optimized Giemsa Buffer**.
7. Air dry slides at room temperature.
8. Dip slide in Xylene.
9. Coverslip immediately using a permanent mounting media.

**QUALITY CONTROL:** American MasterTech Scientific Recommended Control Slide: Bone marrow or Helicobacter control. Or use control slides Bone Marrow CSBMA25- Helicobacter CSHEL25

**PROFICIENCY TESTING:** College of American Pathologists HistoQIP.

**RESULTS:**
- Nuclei: Blue to violet
- Rickettsias: Intense reddish-purple
Cytoplasm: Light blue
Collagen & Muscle: Pale pink
Erythrocytes: Gray, yellow or pink
Helicobacter: Blue

PROCEDURE NOTES:

SPECIMEN: Paraffin sections cut at 4 microns and mounted on charged glass microslides.

MATERIALS, REAGENTS: OPTIMIZED GIEMSA STAIN KIT ITEM KTOGIPT

CAUTION: CORROSIVE, IRRITANT
Wear appropriate protective equipment.

SOLUTIONS

WORKING GIEMSA SOLUTION:
GIEMSA STAIN (STOCK) ........... 2.5 ml
OPTIMIZED GIEMSA BUFFER ........ 50 ml
Mix thoroughly!

INSTRUMENTATION OR EQUIPMENT: Automated H&E stainer, Light Microscope

Form Name & Number or Attachment Name (If Applicable):
Histo28.01

Author Position:
Lead Histologist

Review/Revision Authority (Position Not Individual Name):
Lead Histologist

Expert Consultant Position/s (Not Individual Name/s):
N/A

References (Required for Clinical Documents):

Is there a Regulatory Requirement? Yes □ No □
If yes, insert requirement information here:

Review History (No Changes):
Shelly M. Siegel HT Date: 12/1/10 Reviewed □ Revised □Mark Magilner MD Date: 12/2/10 Reviewed □ Revised □

Revision History (Note changes in area under header):
N/A

Computer Search Words:
N/A

Policy, Procedure or Protocol Cross Reference Information: