

Pathology Core Protocol



Protocol Section: Staining Procedures-Manual
Protocol Subject: Giemsa Stain

Policy No: P-CMHD2-GIEM-00
Effective Date:
Date Reviewed: 6 January 2003
Date Revised:

Solutions:

Working Giemsa Solution

Merck Giemsa (BDH)	10 ml
0.1 M Phosphate buffer (pH 6.8)	40 ml
Prepare fresh each day.	

0.1 M Phosphate Buffer (pH 6.8)

Monobasic sodium phosphate ($\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$)	7 g
Dibasic sodium phosphate (Na_2HPO_4)	7 g
Distilled water	1000 ml

Differentiator

Glacial acetic acid	1 ml
Distilled water	1000 ml

Procedure:

1. Take sections to water.
2. Rinse slides in distilled water.
3. Stain in working Giemsa for 1 hour.
4. Rinse slides in distilled water.
5. Place slides in differentiator for 3 minutes.
6. Rinse slides in distilled water.
7. Dehydrate in 2 changes of acetone.
8. Clear in xylene and mount.

Results:

Nuclei - dark blue, sharp chromatin
 Muscle - pink
 Bone - pale purple (pink with a blue cast)
 Eosinophils - bright pink
 Mast cells - purple
 Plasma cells - sky-blue Golgi with dark blue periphery

Reference: Bancroft, J.D., Stevens, Alan : Theory and Practice of Histological Techniques

Issued by Lab Manager: _____ **Date:** _____

Approved by Facility Management: _____ **Date:** _____