

## Giemsa Control Slides – Technical Memo

<b>CONTROL SLIDES:</b>	<b>Part 4240A</b>	<b>Part 4240B</b>
	10 Slide/Set	98 Slide/Set

### PRODUCT SPECIFICATIONS:

**Tissue:** Positive staining spleen.

**Fixation:** Formalin 10%, Phosphate Buffered (Part 1090).

**Section/Glass:** Paraffin sections cut at 4 microns on Superfrost™ Plus slides.

**Quality Control Stain:** May-Grunwald Giemsa 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 May-Grunwald Giemsa Stain:	Individual Stain Solution
Jenner Stock Stain	Part 1210
Giemsa Stock Stain, Wolbach	Part 1121
Alcohol, Methanol Anhydrous, ACS	Part 12236
Acetic Acid 1%, Aqueous	Part 10012

### APPLICATION:

Newcomer Supply Giemsa Control Slides are for the positive histochemical and differential staining of hematopoietic tissue.

### NEWCOMER SUPPLY VALIDATION PROCEDURE:

- Heat dry sections in oven according to your laboratory protocol.
- 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.
  - See Procedure Notes #1 and #2.
- Rinse in two changes of Alcohol, Methanol Anhydrous, ACS (12236); 3 minutes each.
- Prepare **fresh** Working Jenner Stain Solution just prior to use; combine and mix well.
  - Distilled Water 20 ml
  - Jenner Stock Stain 20 ml
- Place slides in **fresh** Working Jenner Stain Solution for 6 minutes.
- Prepare **fresh** Working Giemsa Stain Solution just prior to use; combine and mix well.
  - Distilled Water 47 ml
  - Giemsa Stock Stain, Wolbach 3 ml
- Place slides directly into **fresh** Working Giemsa Stain Solution for 45 minutes.
- Rinse quickly in distilled water.
- Differentiate **each slide individually** in Acetic Acid 1%, Aqueous (10012); 6-10 dips.
  - Check microscopically for well differentiated nuclei.
- Rinse in distilled water.
- Dehydrate in two changes each of 95% and 100% ethyl alcohol. Clear in three changes of xylene, 10 dips each; coverslip with compatible mounting medium.

### RESULTS:

Nuclei	Blue/violet
Cytoplasm	Pink/rose to lighter blue shades

### PROCEDURE NOTES:

- Drain slides after each step to prevent solution carry over.
- Do not allow sections to dry out at any point during procedure.
- The color range of the stained cells may vary depending upon fixation and degree of differentiation.
- If using a xylene substitute, closely follow the manufacturer's recommendations for deparaffinization and clearing steps.

### REFERENCES:

- Luna, Lee G. *Manual of Histologic Staining Methods of the Armed Forces Institute of Pathology*. 3rd ed. New York: Blakiston Division, McGraw-Hill, 1968. 121-122.
- Shapiro, Stanley H., and Hilda Laufer. "Observations on Fixation and Staining of Bone Marrow Biopsies." *The Journal of Histotechnology* 11.3 (1988): 145-47.
- Sheehan, Dezna C., and Barbara B. Hrapchak. *Theory and Practice of Histotechnology*. 2nd ed. St. Louis: Mosby, 1980. 157.
- Modifications developed by Newcomer Supply Laboratory.

