

# Giemsa Stain Kit (May-Grunwald)

## (For Bone Marrow)

**Description:** The Giemsa Stain Kit (May-Grunwald) is intended for use in the visualization of cells present in hematopoietic tissues and certain microorganisms. This kit may be used on formalin-fixed, paraffin-embedded or frozen sections.

Nuclei:	Blue/Violet
Cytoplasm	Light Blue
Collagen:	Pale Pink
Muscle Fibers:	Pale Pink
Erythrocytes:	Gray, Yellow or Pink
Rickettsia:	Reddish-Purple
Helicobacter Pylori:	Blue
Mast Cells:	Dark Blue with Red Granules

**Uses/Limitations:** For In-Vitro Diagnostic use only.  
Histological applications.  
Do not use past expiration date.  
Use caution when handling these reagents.

**Control Tissue:** Blood Film  
Any well fixed tissue.


### Availability/Contents:

<u>Kit Contents</u>	<u>Volume</u>	<u>Storage</u>
May-Grunwald Stock Solution	500 ml	Room Temperature
Giemsa Stock Solution	500 ml	Room Temperature
Phosphate Buffer Solution, pH 6.8	500 ml	Room Temperature

**Precautions:** Keep away from open flame.  
Avoid contact with skin and eyes.  
Harmful if swallowed.  
Follow all Federal, State, and local regulations regarding disposal.  
Use in chemical fume hood whenever possible.

### Preparation of Reagents Prior to Beginning:

1. Prepare **Working May-Grunwald Solution** by mixing 25ml of May-Grunwald Solution with 25ml of Phosphate Buffer Solution, pH 6.8.
2. Prepare **Working Giemsa Solution** by mixing 2.5ml of Giemsa Stock Solution with 50ml of Phosphate Buffer Solution, pH 6.8.

Storage: 18° C  25° C

**Store Components at Room Temperature.**

701 Hemlock Road - Morgantown, PA 19543, U.S.A. - Tel. (610) 524-5810 - Fax (610) 901-3046 - [www.azersci.com](http://www.azersci.com)

### Procedure (Standard):


1. Deparaffinize sections if necessary and hydrate to distilled water.
2. Place slide in staining tray and flood with Working May-Grunwald Solution for 6 minutes. Note: Agitate slide occasionally to insure proper staining.
3. Flood slide with Phosphate Buffer Solution, pH 6.8 until no stain runs off.
4. Flood slide with Working Giemsa Solution for 13 minutes. Note: Agitate slide occasionally to insure proper staining.
5. Flood slide with Phosphate Buffer Solution, pH 6.8 until no stain runs off.
6. Allow slide to remain in Phosphate Buffer Solution, pH 6.8 for an additional 3 minutes.
7. Dip slide quickly in distilled water and air dry at room temperature.
8. Dip slide in Xylene or Xylene Substitute.
9. Mount in synthetic resin.

### Procedure (Mast Cells):

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. Place slide in staining tray and flood with Working May-Grunwald Solution for 6 minutes. Note: Agitate slide occasionally to insure proper staining.
3. Flood slide with Phosphate Buffer Solution, pH 6.8 until no stain runs off.
4. Flood slide with Working Giemsa Solution for 13 minutes. Note: Agitate slide occasionally to insure proper staining.
5. Flood slide with Phosphate Buffer Solution, pH 6.8 until no stain runs off.
6. Differentiate by dipping slide in Acetic Acid Solution (0.25%) until background is desired intensity.
7. Dip slide 20 times in Phosphate Buffer Solution, pH 6.8.
8. Dip slide quickly in distilled water and air dry at room temperature.
9. Dip slide in Xylene or Xylene Substitute.
10. Mount in synthetic resin.

### References:

1. Sheehan, D., Hrapchak, B., Theory and Practice of Histotechnology: 2<sup>nd</sup> Edition, 1980, pages 155-156.
2. A.F.I.P. Laboratory Methods in Histotechnology; 1992, pages 111.
3. Laboratory Medicine: Vol. 25, No. 6, June 1994, page 389.

Storage: 18° C  25° C

**Store Components at Room  
Temperature.**