



Instructions For Use GMG-1-IFU

Rev. Date: Mar. 1, 2016

Revision: 3

Page 1 of 3

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

Giemsa Stain Kit (May-Grunwald) (For Bone Marrow)

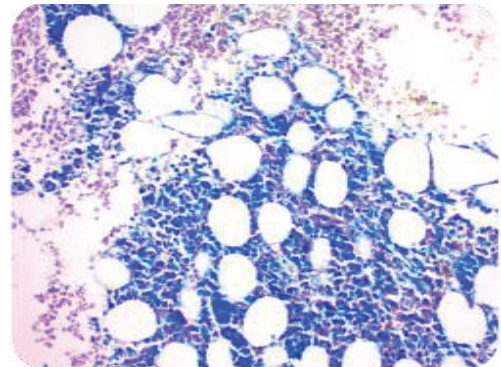
Description:

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.

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

Uses/Limitations:

*Not to be taken internally.
For In-Vitro Diagnostic use only.
Histological applications.
Do not use if reagents become cloudy.
Do not use past expiration date.
Use caution when handling reagents.
Non-Sterile.*



Control Tissue:

*Blood Film.
Bone Marrow.
Spleen.
Any well fixed tissue.*

Ordering information regarding individual components on back page!


Availability/Contents:

<u>Item #</u>	<u>Kit Contents</u>	<u>Volume</u>	<u>Storage</u>
MAY500	May-Grunwald Stock Solution	500 ml	18-25°C
GGS500	Giemsa Stock Solution	500 ml	18-25°C
PBM500	Phosphate Buffer Solution, pH 6.8	500 ml	18-25°C

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.*

Storage: 18° C  25° C

 ScyTek Laboratories, Inc.
205 South 600 West
Logan, UT 84321
U.S.A.



 EmergoEurope (31)(0) 70 345-8570
Molsstraat 15
2513 BH Hague, The Netherlands

Preparation of Reagents Prior to Beginning:

1. Prepare **Working May-Grunwald Solution** by mixing 25ml of May-Grunwald Solution (MAY500) with 25ml of Phosphate Buffer Solution, pH 6.8 (PBM500).
2. Prepare **Working Giemsa Solution** by mixing 2.5ml of Giemsa Stock Solution (GGS500) with 50ml of Phosphate Buffer Solution, pH 6.8 (PBM500). **If staining a peripheral blood smear, instead mix 7.5ml of Giemsa Stock Solution (GGS500) with 50ml of Phosphate Buffer Solution, pH 6.8 (PBM500).**

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 5-7 minutes. Note: Agitate slide occasionally to insure proper staining.
3. Carefully flood slide with Phosphate Buffer Solution, pH 6.8 until stain no longer runs off.
4. Flood slide with Working Giemsa Solution for 10-15 minutes. Note: Agitate slide occasionally to insure proper staining.
5. Carefully flood slide with Phosphate Buffer Solution, pH 6.8 until stain no longer 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 to remove buffer and air dry at room temperature.
8. Dip slide twice 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 5-7 minutes. Note: Agitate slide occasionally to insure proper staining.
3. Carefully flood slide with Phosphate Buffer Solution, pH 6.8 until stain no longer runs off.
4. Flood slide with Working Giemsa Solution for 10-15 minutes. Note: Agitate slide occasionally to insure proper staining.
5. Carefully flood slide with Phosphate Buffer Solution, pH 6.8 until stain no longer runs off.
6. Differentiate by dipping slide in Acetic Acid Solution (0.25%) until background is desired intensity.
7. Dip slide for 10 seconds in Phosphate Buffer Solution, pH 6.8 while agitating gently.
8. Dip slide quickly in distilled water to remove buffer and air dry at room temperature.
9. Dip slide twice in Xylene or Xylene Substitute.
10. Mount in synthetic resin.

Storage: 18° C



25° C

ScyTek Laboratories, Inc.
205 South 600 West
Logan, UT 84321
U.S.A.EC REP EmergoEurope (31)(0) 70 345-8570
Molsstraat 15
2513 BH Hague, The Netherlands

Instructions For Use GMG-1-IFU

Rev. Date: Mar. 1, 2016

Revision: 3

Page 3 of 3

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com


References:

1. Sheehan, D., Hrapchak, B., *Theory and Practice of Histotechnology: 2nd 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.
4. De Brauwer, E., Jacobs, J., Nieman, F., Bruggeman, C., Drent, M. *Test Characteristics of Acridine Orange, Gram, and May-Grunwald-Giemsa Stains for Enumeration of Intracellular Organisms in Bronchoalveolar Lavage Fluid*. *Journal of Clinical Microbiology*, 1999, 37(2): pages 427-429.
5. Amer, M., Abd Elnasser, T., El Haggag, S., Mostafa, T., Abdel-Malak, G., Zohdy, W. *May-Grunwald-Giemsa stain for detection of spermatogenic cells in the ejaculate: a simple predictive parameter for successful testicular sperm retrieval*. *Human Reproduction*, July 2001, 16(7): pages 1427-1432.
6. Ferro, D.P., Falconi, M.A., Adam, R.L., Ortega, M.M., Lima, C.P., de Souza, C.A., Lorand-Metze, I., Metze, K. *Fractal Characteristics of May-Grunwald-Giemsa Stained Chromatin Are Independent Prognostic Factors for Survival in Multiple Myeloma*. 2011, *Plos ONE* 6(6): e20706. Doi:10.1371/journal.pone.0020706.

Bulk Reagent Ordering Information and Current Pricing at www.scytek.com

Description:	Catalog #	Volume
May-Grunwald Stock Solution	MAY125	125 ml
	MAY500	500 ml
	MAY999	1000 ml
Giemsa Stock Solution	GG5125	125 ml
	GG5500	500 ml
	GG5999	1000 ml
Phosphate Buffer Solution, pH 6.8	PBM500	500 ml
	PBM999	1000 ml

Storage: 18° C  25° C

 ScyTek Laboratories, Inc.
205 South 600 West
Logan, UT 84321
U.S.A.



 EmergoEurope (31)(0) 70 345-8570
Molsnstraat 15
2513 BH Hague, The Netherlands