

MAY-GRUENWALD powder dye

IVD In vitro diagnostic medical device CE

For blood smears and bone marrow staining

INSTRUCTIONS FOR USE

REF Product code: MG-P-25 (25 g) MG-P-50 (50 g)

Introduction

Histology, cytology and other related scientific disciplines study the microscopic anatomy of tissues and cells. In order to achieve a good tissue and cellular structure, the samples need to be stained in a correct manner. May-Gruenwald powder dye is intended for microscopy staining using different methods. It is used to stain smears of peripheral blood and bone marrow. Often combined with Giemsa stain.

Product description

- **MAY-GRUENWALD** – Powder dye for preparation of dye solution for staining in cytology and hematology and in combination with Giemsa stain
- Other preparations and reagents used in preparing the dye solution:
- Methanol (CH₃OH)
 - Phosphate buffer solution
 - Giemsa powder dye solution (product code G-P-25, G-P-50)

Preparing the dye solution

May-Gruenwald dye solution:

- Dissolve 0.25 g of May-Gruenwald powder dye in 100 ml of ethanol while heating in water bath at 60°C
- Stir for 60 minutes, leave to set for 10 minutes, and then filter

Diluted Giemsa powder dye solution:

- Dilute 10 ml of Giemsa powder dye solution with 190 ml of phosphate buffer
- Mix well; let it set for 10 minutes, then filter

Result

Nuclei	red to purple
Lymphocytes	plasma: blue
Monocytes	plasma: blue
Neutrophil granulocytes	granules: light purple
Eosinophil granulocytes	granules: brick red to red-brown
Basophil granulocytes	granules: dark purple to black
Thrombocytes	purple
Erythrocytes	reddish

Note

The mentioned formulation is only one of the ways of preparing the dye solution. May-Gruenwald dye is most frequently used in cytology and hematology with Giemsa stain. Depending on personal requests and standard laboratory operating procedures, the dye solution can be prepared according to other protocols.

Preparing the sample and diagnostics

Use only appropriate instruments for collecting and preparing the samples. Process the samples with modern technology and mark them clearly. Follow the manufacturer's instructions for handling and application. In order to avoid mistakes, the staining procedure and diagnostics should only be conducted by authorized and qualified personnel. Use only microscope according to standards of the medical diagnostic laboratory. In order to avoid an erroneous result, a positive and negative check is advised before application.

Safety at work and environmental protection

Handle the product in accordance with safety at work and environmental protection guidelines. Used solutions and out of date solutions should be disposed of as special waste in accordance with national guidelines. Chemicals used in this procedure could pose danger to human health. Tested tissue specimens are potentially infectious. Necessary safety measures for protecting human health should be taken in accordance with good laboratory practice. Act in accordance with signs and warnings notices printed on the product's label, as well as in BioGnost's material safety data sheet.














Storing, stability and expiry date

Keep May-Gruenwald powder dye in a tightly sealed original packaging at temperature between 15°C and 25°C. Keep in dry places, do not freeze and avoid exposure to direct sunlight. Expiry date is stated on the product's label.

References

1. Conn, J. (1977): *Biological Stains*, 9th ed. Baltimore: Williams and Wilkens Co.
2. Carson, F. L. (2007): *Histotechnology*, 2nd ed. Singapore
3. Romanowsky, D.L. (1891), St. Petersburg Med. Wshr. 16, pp. 297-302, 307-315.
4. Lillie, R.O. (1969): *Biological Stains*, 8th edition, Williams & Wilkins Co., Baltimore, MD, pp. 350-357.

MG-P-X, V1, 2 February 2015, VR/IŠP

	Refer to the supplied documentation		Storage temperature range		Number of tests in package		Product code		European Conformity
	Refer to supplied instructions		Keep away from heat and sunlight		Valid until		Lot number		Manufacturer
	For <i>in vitro</i> diagnostic use only		Keep in dry place		Caution - fragile				



BIOGNOST Ltd.
 Medjugorska 59
 10040 Zagreb
 CROATIA
www.biognost.com

