PYRONINE B powder dye, C.I. 45010

IVD *In vitro* diagnostic medical device CE

Pyronine B, BSC certified dye
For staining bacteria, mold and RNA

INSTRUCTIONS FOR USE

REF Catalogue number: PYB-P-25 (25 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. Pyronine B powder dye is most commonly used for staiing bacteria and mold. Combined with other dyes, such as BioGnost's Methyl Green powder dye, Pyronine B may be used for staining RNA and malignant plasma cells in cytoplasm, such as plasmocytes. DNA has lower affinity to Methyl Green, and Pyronine B has affinity to RNA, so the nuclei will be stained green, and RNA (plasma cells) red.

Product description

- **PYRONINE B** - Powder dye for making the solution for staining bacteria and mold.

Other preparations and reagents used in preparing the dye solution:

- Microscopy powder dyes, such as BioGnost's Methyl Green powder dye (product code MGR-P-25)
- Acetate buffer pH=4.8
- 0.2 M acetic acid, (CH_3COOH)
- 0.2 M sodium acetate, (CH_3COONa)
- Glycerol, ($C_3H_9O_3$)

Preparing the solutions for staining

Pyronine B - Methyl Green staining solution:

- mix 4 ml of 0.2% Pyronine B powder dye aqueous solution ,9 ml of 0.2% aqueous solution of Methyl Green powder dye, 23 ml of glycerol, 0.2 M acetic acid and 0.2 M sodium acetate.
- mix 0.2 M acetic acid and sodium acetate in 2:3 ratio.

Results

DNA (nucleus) - green to green-blue
RNA (plasma cells, bacteria, Nissl bodies) - red
Mucins (not all) - red

Note

The mentioned formulation is only one of the ways of preparing the dye solution. 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. 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. Both positive and negative controls are recommended before applying.

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 which is available on demand.

Storing, stability and expiry date

Keep Pyronine B powder dye in a tightly closed original package 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 Wilkins Co.
2. Cook, H. C.:Manual of Histological Demonstration Techniques, p 42, volume 2, Number 2, 77-82.

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	Refer to the supplied documentation	°C	Storage temperature range	Σ	Number of tests in package	REF	Product code	CE	European Conformity
	Refer to supplied instructions		Keep away from heat and sunlight		Valid until	LOT	Lot number		Manufacturer
IVD	For *in vitro* diagnostic use only		Keep in dry place		Caution - fragile				

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