

WATER BLUE powder dye, C.I. 42755

IVD In vitro diagnostic medical device

CE

Acid Blue 22, BSC certified powder dye

For staining of connective tissues using Mallory and Gomori trichrome methods

INSTRUCTIONS FOR USE

REF Catalogue number: WB-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. Water Blue dye, known as aniline blue WS or Acid Blue 22 is a component of many polychromatic dyes, such as Heidenhain's AZAN dye and Mann's dye, as well as various staining methods, such as Mallory, Masson, Gomori polychromatic staining methods, and Lendrum's MSB technique. Water Blue is used as a counterstain in histology and cytology, as well as the pH indicator (pH 10.0-13.0). Water Blue can also stain histones, that being the standard method of determining the maturity of a nucleus. The activity of a sperm is also determined using the Eosin-Water Blue dye.

Product description:

- **WATER BLUE** - Biological Stain Commission (BSC) certified powder dye for preparing microscopic identification of connective tissues and collagen.

Other preparations and reagents used in preparing the dye solution:

- Glacial acetic acid (CH_3COOH)
- Phosphotungstic acid ($\text{H}_3\text{PW}_{12}\text{O}_{40}\cdot x\text{H}_2\text{O}$)
- Microscopy powder dyes, such as BioGnost's Fuchsin Acid dye (product code FA-P-25)
- Microscopy powder dyes, such as BioGnost's Orange G dye (product code OG-P-25, OG-P-100)
- Microscopy powder dyes, such as BioGnost's Chromotrope 2R dye (product code C2R-P-25)
- Staining reagent for use in histopathology, such as BioGnost's Hematoxylin W kit (HEMW-K-30, HEMW-K-100, HEMW-K-500)

Preparing the solutions for staining:

Gomori trichrome stain for connective tissues:

- Dissolve 0.3 g of Water Blue powder stain, 0.8 g of phosphotungstic acid, 0.6 g of chromotrope 2R powder stain and 1 ml of glacial acetic acid in 100 ml of distilled/demineralized water.

Mallory dye for connective tissues:

- 0.5% solution of Fuchsin Acid stain
Dissolve 0.5 g of Fuchsin Acid stain in 100 ml of distilled/demineralized water.
- Water Blue solution
Dissolve 0.5 g of Water Blue powder stain, 2 g of Orange G powder dye, and 1 g of phosphotungstic acid in 100 ml of distilled/demineralized water.

Working solution of Hematoxylin W kit:

- Mix equal volumes of Hematoxylin, alcoholic solution and Ferri reagent.
Note: Weigert Hematoxylin working solution use in 2-3 days' time.

Result of staining with Gomori stain for connective tissues

- Muscle fibers - red
- Collagen fibers - blue
- Nucleus - blue-black
- Erythrocytes - red

Result of staining with Mallory's stain for connective tissues

- Muscle fibers - red
- Collagen fibers - blue
- Nuclei - red
- Erythrocytes - orange-red

Note

The mentioned formulation is only one of the ways of preparing the dye solution. Water Blue WS is the most commonly used dye in Mallory and Gomori methods. Depending on personal requests and standard laboratory operating procedures, the dye solution can be prepared according to other protocols. It is a common substitution for Aniline Blue powder dye.

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. 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 Water Blue 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. Mallory, F. B. (1938): Pathological techniques, Philadelphia, W.B. Saunders Company
3. Gomori, G. (1950): Aldehyde fuchsin: A new stain for elastic tissues, American Journal of Clinical Pathology 20, 665.

WB-P-25, V2-EN1, 30 September 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 in vitro diagnostic use only	 Keep in dry place	 Caution - fragile		



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