

ANILINE BLUE powder dye, C.I. 42780

IVD In vitro diagnostic medical device



China Blue, Acid Blue 93, C.I. 42780, BSC certified powder dye For staining of connective tissues using Mallory and Gomori trichrome methods

INSTRUCTIONS FOR USE

REF Product code: CAB-P-25G (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. Aniline Blue (known as China Blue) is an integral part to many polychromatic stains. There are many methods that use Aniline Blue for staining methods. Some of them include Heidenhain's AZAN stain, Mallory's polychrome stain (both contain Aniline Blue-Orange G blend as a part of staining method), Mann's stain (contains Aniline Blue-Eosin blend), Masson's stain and Lendrum's MSB technique that use Aniline Blue and Mallory's connective tissues stains in the last step (used with the Fuchsin Acid stain). Aniline Blue is used as a contrasting stain in histology and cytology, as well as the pH indicator (pH 10.0-13.0). Aniline 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-Aniline Blue stain.

Product description:

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

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 stains, such as BioGnost's Fuchsin Acid stain (product code FA-P-25)
- Microscopy powder dyes, such as BioGnost's Orange G dye (product code OG-P-25, OG-P-100)
- Microscopy stains, such as BioGnost's Chromotrope 2R stain (product code C2R-P-25)
- Staining reagent for use in histopathology, such as BioGnost's Hematoxylin W kit (product code 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 Aniline Blue WS 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's dyes 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
- Aniline Blue solution
Dissolve 0.5 g of Aniline Blue powder stain, 2 g of Orange G powder stain, 1 g of phosphotungstic acid in 100 ml of distilled/demineralized water.
- Hematoxylin W kit working solution (HEMW-K-30, HEMW-K-100, HEMW-K-500):
Stir equal volumes of solutions A and B

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. Aniline Blue WS is the most commonly used dye in Mallory's and Gomori's methods. 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. 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 Aniline 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 exposing 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.

CAB-P-25G, IFU-V4-EN3, 12 January 2017., AK/VR

	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				



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