

BRILLIANT CRESYL BLUE powder dye, C.I. 51010

IVD In vitro diagnostic medical device

CE

Brilliant Blue C

For use in hematology and histology **INSTRUCTIONS FOR USE**

REF Product code: BCB-P-10 (10 g)

BCB-P-25 (25 g)

Introduction

Supravital staining is a method of staining used in microscopy to examine living cells that have been removed from an organism. It differs from intravital staining, which is done by injecting or otherwise introducing the stain into the body. Thus a supravital stain may have a greater toxicity, as only a few cells need to survive it for a short period of time. As the cells are alive and unfixed, outside the body, supravital stains are temporary in nature. The most common supravital stain is performed on reticulocytes using brilliant cresyl blue, which makes it possible to see the reticulofilamentous pattern of ribosomes characteristically precipitated in these live immature red blood cells by the supravital stains. By counting the number of such cells the rate of red blood cell formation can be determined, providing an insight into bone marrow activity and anemia.

Product description

• BRILLIANT CRESYL BLUE - Powder dye for manufacturing solution for microscopic counting of reticulocytes and for other uses in histology

Other preparations and reagents used in preparing the dye solution:

Saline (0.85% NaCl)

Preparing the solutions for staining

Brilliant Cresyl Blue, 1% solution:

- Dilute 1 g of Brilliant Cresyl Blue powder dye in 100 mL of saline and filter
- Store as saturated (stock) solution
- Prepare the working solution in form of diluted stock dye solution and saline in ratios ranging from 1:80 to 1:200. Note: Conduct a test for optimal dilution.

Result

Reticulocyte counting

The number of reticulocytes is expressed as the ratio to 100 counted erythrocytes, i.e. as percentage.

Normal reticulocyte values (%):

Grownups: 0.5-1.5 Newborns: 2-6

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. 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 quidelines. 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 Brilliant Cresyl Blue 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.

1. Conn, J. (1977): Biological Stains, 9th ed., Baltimore: Williams and Wilkens Co.

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| | Î | Refer to the supplied documentation | °C 🌓 °C | Storage temperature range | \sum | Number of tests in package | REF | Product code | C | ϵ | European Conformity | *** | BIOGNOST Ltd. Medjugorska 59 10040 Zagreb | | ϵ |
| | Ti | Refer to supplied instructions | * | Keep away from heat and sunlight | | Valid until | LOT | Lot number | * | 4 | Manufacturer | | CROATIA www.biognost.com | | |
| | IVD | For in vitro diagnostic | * | Keep in dry place | | Caution - fragile | | | | | | | | | |