

# SUDAN III powder dye, C.I. 26100

IVD In vitro diagnostic medical device

CE

Sudan Red III, Solvent Red 23, Sudan G, Fat Ponceau G, C.I., BSC certified dye For lipid staining acc. to Lillie-Ashburn

## INSTRUCTIONS FOR USE

REF Catalogue number: S3-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. Sudan III powder dye is used in various staining methods in microscopy. Sudan III is a lysochrome (dye soluble in fats) most commonly used for lipid staining according to Lillie-Ashburn. It is also used for staining other hydrophobic substances.

### **Product description**

• SUDAN III - Biological Stain Commission (BSC) certified powder dye for preparing the dye solution for staining lipids and hydrophobic substances.

Other preparations and reagents used in preparing the dye solution

• 99% isopropanol (C<sub>3</sub>H<sub>7</sub>OH)

#### Preparing the dye solution

Saturated Sudan III solution:

- Prepare the saturated Sudan III dye solution in 99% isopropanol by diluting the excessive dye (~0.5 g) in 100 ml of 99% isopropanol.
- Let it set for 2-3 days before using the supernatant. Note: The supernatant may be used for 10 years. It should be replaced when the dye fades.

Working Sudan III stain:

- Dilute 6 ml of saturated Sudan III dye with 4 ml of distilled/demineralized water.
- Let it set for 5-10 minutes.
- Filter the solution.

Note: The filtrate may be used for several hours.

#### Result

Lipids - yellow-orange

Nuclei - blue

Cytoplasm - green

Note: The results refer to lipid staining according to Lillie-Ashburn.

#### Note

The mentioned formulation is only one of the ways of preparing the dye solution. Sudan III dye is most commonly used according to Lillie-Ashburn. 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 quidelines. 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

## Storing, stability and expiry date

Keep Sudan III dye in a tightly closed original package at room temperature. 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. Carson, F. L., Hladik, C. (2009): Histotechnology: A Self-Instructional Text, 3rd ed., Chicago: ASCP Press
- Lillie, R. D., Ashburn L. L., (1943): Supersaturated solutions of fat stains in dilute isopropanol for demonstration of acute fatty degeneration not shown by Herxheimer's technique, Archives of Pathology 36, 432

REF

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S3-P-25, V4-EN3, 30 September 2015, VR/IŠP

<u> </u>	Refer to the supplied documentation		Storage temperature range
Ţį	Refer to supplied instructions		Keep away from heat and sunlight
IVD	For in vitro diagnostic use only	*	Keep in dry place







