

SUDAN IV powder dye, C.I. 26105

IVD *In vitro* diagnostic medical device

CE

Solvent Red 24, Biebrich Scarlet R, Scarlet Red, Fat Ponceau For staining lipids

INSTRUCTIONS FOR USE

REF Catalogue S4-P-25 (25 g)
number:

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 IV is lipophilic diazo dye, very similar to Sudan III. It is primarily used in Sudan IV staining method or in Churukian's variety of Lillie-Ashburn method in which it replaces Oil Red O. Those methods are used for staining lipids, triglycerides and lipoproteins on frozen histology sections. They are also used for identifying outer lipid sheath of pollen grains and for identification of liquid fats in food.

Product description

- **SUDAN IV** - Powder dye for making solution for use in histology and histochemistry

Example of use of Sudan IV powder dye in Sudan IV lipid staining method

Other sections and reagents that are used in the staining method:

- Ethyl alcohol, 70%
- Ethyl alcohol, 50%
- hematoxylin solution, such as Mayer's hematoxylin
- High-quality glass slides for use in histopathology and cytology, such as VitroGnost SUPER GRADE or one of more than 30 models of BioGnost's glass slides
- Medium for covering microscope slides and mounting medium for cover slips, such as BioGnost's BioMount Aqua or a glycerol-based medium
- VitroGnost cover glass, dimensions range from 18x18 mm to 24x60 mm
- BioGnost's immersion media, such as Immersion oil, Immersion oil, types A, C, FF, 37, or Immersion oil Tropical Grade

Preparation of Sudan IV dyeing solution

- Add 0.5 g of Sudan IV powder dye in 100 mL of ethyl alcohol
- Leave Sudan IV solution to set for 2-3 days before use

The solution is stable for a few years at room temperature.

Frozen histological sections staining procedure

1.	Place frozen sections on a clean glass slide	
2.	Rinse in 70% ethyl alcohol	
3.	Stain using Sudan IV, solution	1 min
4.	Rinse in 50% ethyl alcohol until the dye is completely washed off	5 seconds
5.	Rinse in 2 exchanges of distilled (demi) water	
6.	Stain the nucleus with Mayer's hematoxylin	3 min
	Note: this step may be skipped	
7.	Rinse the section in tap water	3 min
8.	Cover/mount with water-based (BioMount Aqua) or glycerol-based medium	

Cover with VitroGnost cover glass.

Note

Time periods of staining processes are not entirely standardized and they approximately correspond to clinical and laboratory practical experience. Intensity of staining depends on the period of immersion in the dye. Real staining protocol depends on personal requests and priorities.

Results

Orange-red - lipids
Blue - nuclei

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.

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 Sudan IV powder dye in a tightly sealed original packaging at temperature between 15 °C and 25°C. Keep in dry places, do not freeze and avoid exposing to direct sunlight. Date of manufacture and expiry date are printed on the product's label.

References

1. Culling, C.F.A. (1974): Handbook of histopathological and histochemical techniques, 2nd ed., Butterworth, London, UK.
2. Sheehan D.C. et Hrapchak, B.B. (1980): Theory and Practice Histotechnology, 2nd ed., CV Mosby, St. Louis, (MO), pp 52, p 14-167.

S4-P-25, V2-EN1, 15 February 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 in vitro diagnostic use only		Keep in dry place		Caution - fragile				

 BIOGNOST Ltd.
Medjugorska 59
10040 Zagreb
CROATIA
www.biognost.com

