BIOGNOST ®

AURAMINE O C.I. 41000

IVD In vitro diagnostic medical device   CE

Basic Yellow 2, BSC certified stain
For staining acid-fast lung tissue bacteria acc. to Truant

INSTRUCTIONS FOR USE

REF Product code: AU-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. Auramine O powder dye is used in various staining methods in microscopy. It is used in clinical microbiology and histology for detecting tuberculosis Mycobacteria and other acid-fast bacteria. Staining using Auramine O is a fluorescent method of visualizing acid-fast bacteria. Mycobacteria are difficult to stain due to high amount of lipids and wax in their cellular membranes. When stained using Auramine O dye, acid-fast mycobactera retain the dye even when exposed to strong destaining solutions, such as HCl-ethanol.

Product description

- **AURAMINE O** - Biological Stain Commission (BSC) certified powder dye for preparing solution for detecting *Mycobacterium tuberculosis* and other acid-fast bacteria

Other preparations and reagents used in preparing the dye solution:
- Microscopy powder dyes, such as BioGnost's Rhodamine B dye (product code RHB-P-25)
- Phenol (C_6H_5OH)
- Glycerol ($C_3H_5(OH)_3$)

Preparing the solutions for staining

Auramine O-Rhodamine B staining solution:
- Dissolve by mixing 3 g of Auramine O powder dye adn 1.5 g of Rhodamine B powder dye in 150 ml of glycerol at room temperature. Add 20 ml of molten phenol (at 45°C) and 100 ml of distilled/demineralized water
- After mixing, filter through glass wool

Results

Tb bacterija (ARB) - red or greenish fluorescence
Background - dark

Note

The mentioned formulation is only one of the ways of preparing the dye solution. Auramine O dye is most commonly used according to Truant method. 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. Both positive and negative controls are recommended before applying.

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 which is available on demand.

Storing, stability and expiry date

Keep Auramine O 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. Kiernan, J. A. (2008): *Histological and Histochemical Methods*, Theory and Practice, 4th ed., Banbury: Scion Publishing Ltd.
3. Carson, F. L., Hladik, C. (2009): *Histotechnology: A Self-Instructional Text*, 3rd ed., Chicago: ASCP Press

⚠ Refer to the supplied documentation	Storage temperature range	Number of tests in package	REF Product code	CE European Conformity	BIOGNOST Ltd. Medjugorska 59 10040 Zagreb CROATIA www.biognost.com CE
Refer to supplied instructions	Keep away from heat and sunlight	Valid until	LOT Lot number	Manufacturer	
IVD For *in vitro* diagnostic use only	Keep in dry place	Caution - fragile			