

BIOFIX

IVD *In vitro* diagnostic medical device



Methyl alcohol-based fixative for cryostat sections

INSTRUCTIONS FOR USE

REF Catalogue number: BF-500 (500 mL) BF-1L (1000 mL)

Introduction

Frozen tissue samples are often used when there is need for fast diagnosis or when visualization of antigens sensitive to aldehyde fixation and prolonged processing is needed. In general, frozen sections enable much better antigen preservation compared to the paraffin sections because they do not include excessive fixation and prolonged tissue processing, that way leaving the antigens in their native form. When the sample is prepared in an appropriate manner, the sample's tissue morphology is at a high level, but cannot be compared to the paraffin samples because of longer exposition to fixative. Creating sections of cryostatic samples is technically challenging, especially in cases of calcified tissues or tissues containing higher levels of lipids.

Product description

- **BIOFIX** – optimal-concentration fixative for fixing cryostatic samples

Other preparations and reagents that may be used:

- Clearing agents, such as BioClear xylene or a substitute, such as BioClear New agent on the aliphatic hydrocarbons basis
- Dehydrating/rehydrating agent, such as BioGnost's alcohol solutions: Histanol 95 and Histanol 100
- Bluing agents, such as BioGnost's Scott's solution
- Contrast staining reagents, such as BioGnost's eosin solutions: Eosin 0.5% aqueous, Eosin 1% aqueous

Sample processing procedure

- Immerse the section in BioFix fixative for 5-7 seconds.
- Immerse the section 5-10 times in distilled or demineralized water
- Treat the section with Hematoxylin ML solution by immersing it in the solution for 1 min or until an optimal level of staining is achieved
- Immerse the section 5-10 times in distilled or demineralized water
- Rinse the section by immersing it 3 times in a bluing reagent (Scott's solution)
- Dehydrate the section by immersing it 5-7 times in a 95% alcohol solution (Histanol 95)
- Stain the section with one of the contrasting solutions (Eosin Y 0.5% aqueous, Eosin Y 1% aqueous) by immersing it in the solution for 15 seconds or until an optimal level of staining is achieved
- Dehydrate the section by immersing it 5-7 times in a 95% alcohol solution (Histanol 95)
- Completely dehydrate the section by immersing it 5-7 times in a 100% alcohol solution (Histanol 100)
- Clear the section by immersing it 5-7 times in two exchanges of xylene (BioClear) or a xylene substitute (BioNene, BioClear New)

Note

Freeze the tissue as soon as possible in order to reduce artefacts and other unwanted changes (due to drying by air and autolysis). Cut and mount the frozen sample according to standard protocols.

Time periods of 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 sample processing and staining protocol depends on personal requests and priorities.

Preparing the sample and diagnostics

Use only appropriate instruments for collecting and preparing the samples. All the samples must be processed with the most modern technology and be visibly marked. Follow the manufacturer's instructions for handling. In order to avoid mistakes, staining must be conducted by a trained professional. Only trained medical personnel may make a diagnosis. 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 which is available on demand.

Storing, stability and expiry date

Keep BioFix in a tightly sealed original packaging at temperature of +15°C to +25°C. Do not keep in cold 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. Carson, F. L. (2007), *Histotechnology*, 2nd ed. Singapore
2. Cook, D. J. (2006): *Cellular pathology*, 2nd ed. Banbury: Scion Publishing Ltd.
3. Kiernan, J. A. (2008) *Histological and histochemical methods*, 4th ed. Bloxham: Scion Publishing Ltd.

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Refer to the supplied documentation	Storage temperature range	Number of tests in package	REF Product code	European Conformity
Refer to supplied instructions	Keep away from heat and sunlight	Valid until	LOT Lot number	Manufacturer
IVD For <i>in vitro</i> diagnostic use only	Keep in dry place	Caution - fragile		

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

