BIOGNOST®

CITOSPRAY
CITOSPRAY SOLUTION

IVD In vitro diagnostic medical device CE

Solution for fixating cytological smears

INSTRUCTIONS FOR USE

REF Product code: CS-100 (100 ml) CS-1L (1000 ml)

Introduction

Impeccable sample fixation is a prerequisite for a correct cytological diagnosis. Tissue samples must be immersed in an optimally chosen fixative immediately after sampling, while they are still moist. Imminent fixation of the sample prevents drying and cell shape change, in turn enabling clear staining and a correct diagnosis. If the sample was fixated later than it had been recommended, brownish grainy structures will form on cytological samples stained according to Papanicolaou, and that has a negative effect on the further diagnostic procedure. Used for fixating Pap smears.

Product description

- **CITOSPRAY** - Solution for fixation of cytological smears in a spray bottle. Contains an optimal concentration of alcohol and polyglycols.
- **CITOSPRAY SOLUTION** - Solution for fixation of cytological smears in a bottle, for refilling CitoSpray bottle with atomizer.

Other preparations and reagents that can be used in this method, but are not a part of the set:

- Dehydrating/rehydrating agent, such as BioGnost's alcohol solutions: Histanol 70, Histanol 80, Histanol 95 and Histanol 100
- Clearing agents, such as BioClear xylene or a substitute, for instance aliphatic hydrocarbon-based BioClear New agent
- High-quality glass slides for use in histopathology and cytology, such as VitroGnost SUPER GRADE or one of more than 30 types of BioGnost's glass slides
- Covering and mounting media such as BioGnost's BioMount, BioMount Aqua, BioMount C, BioMount DPX, BioMount DPX Low, BioMount DPX High, BioMount M, BioMount New
- VitroGnost cover glass, dimensions range from 18x18mm to 24x60mm
- Staining reagents used in histopathology and cytology, such as BioGnost's hematoxylin solutions: Hematoxylin HP, Hematoxylin G1, Hematoxylin G2 and Hematoxylin G3
- Monochromatic reagent for cytoplasmatic staining according to Papanicolaou, such as BioGnost's OG-6 Papa reagent
- Polychromatic reagents for cytoplasmatic staining according to Papanicolaou, such as BioGnost's: EA 31 Pap reagent, EA 50 Pap reagent, EA 65 Pap reagent

Preparing the cytological smear for staining

Spread the cytological smear on a glass slide (VitroGnost) after sampling, immediately fixate it using BioGnost's fixative in a spray bottle (CitoSpray). Spray it three times equally over still moist cytological smear from the distance of approximately 20 cm in order to avoid rinsing and losing cells because of a too intense jet. Alcohol from CitoSpray will evaporate, and polyglycol will form a protective layer. Cytological smear will be dry after approximately 10 min and ready for staining. A dried sample can be stored or processed further. Samples prepared using this technique remain stable for a period of a few weeks.

Prior to staining using one of BioGnost's hematoxylin solutions, the section must be immersed into a 95% alcohol solution (Histanol 95) for 10 min. This removes polyglycols from the CitoSpray fixative.

Note

Cytological smears staining procedure using BioGnost's fixative in a spray bottle (CitoSpray) is described in BioGnost's Cytology reagents instructions for use.

Usability

100 mL of CitoSpray fixative is sufficient for 250 applications.

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 use. 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 taken care of as a 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 CitoSpray in a tightly sealed original package at a temperature between +15 °C and +25 °C. Do not keep in cold places, do not freeze and avoid exposing to direct sunlight. Production date and expiry date are printed on the product's label. During transport or storage at temperatures below +15 °C, the raw material contained in the CitoSpray fixative may polymerize and form a white precipitate. In order to dissolve the precipitate, the

product should be kept at a higher temperature (+20 °C to +30 °C) with occasional shaking until the precipitate is completely dissolved (within one day). Precipitation and dissolution of precipitate will not impair the quality and functionality of the product.

References

1. Danos, M.L. (1974): *Fixatives for Cytologic Use*, 3rd ed., Chicago.
2. Keebler, C., Reagen J. (1983): *A Manual for Cytotechnology*, American Society of Clinical Pathologists Press, Chicago.
3. Conn, J. (1977): *Biological Stains*, 9th ed., Baltimore: Williams and Wilkens Co.

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	Refer to the supplied documentation		Storage temperature range		Number of tests in package	REF	Product code		European Conformity		BIOGNOST Ltd. Medjugorska 59 10040 Zagreb CROATIA www.biognost.com
	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						