LEUKOGNOST HEM

IVD *In vitro* diagnostic medical device CE

Hematoxylin for use with LeukoGnost kits

INSTRUCTIONS FOR USE

REF Product code: LKH-OT-100 (100 ml) LKH-OT-250 (250 mL) LKH-OT-500 (500 mL)

Introduction

BioGnost's LeukoGnost HEM is a hematoxylin used as nuclear dye for counterstaining cellular nuclei. It is recommended for progressive staining for kits from LeukoGnost range for cytochemical diagnosis of leukemias. LeukoGnost HEM reagent does not interfere with specific stainings that occur during usage of kit. LeukoGnost HEM is a highly-stable hematoxylin and one of formulations of hematoxylin used in histopathology and cytology for a more precise nuclear cell staining. Cellular nuclei are stained intensely deep blue during staining blood sections and bone marrow sections.
Hematoxylin is extracted from logwood (*Haematoxylon campechianum L.*). Hematoxylin oxidates to hematein and binds with metal ions (mordants), hematein turns into irreplaceable nuclear dye. Positively charged hematein-mordant complex then binds with negatively charged phosphate ions of the DNA's nucleus, creating characteristic blue coloration. LeukoGnost HEM is a 50% oxydized hematoxylin, with aluminum as mordant and stabilized using glycols.

Product description:

- **LEUKOGNOST HEM** – for use with LeukoGnost kits

Other sections and reagents that may be used with LeukoGnost HEM:

- BioGnost's kits from LeukoGnost range used for detecting and classifying leukemias: **LeukoGnost MPO** (kit for detecting myeloperoxidase activity in leukocytes), **LeukoGnost ALP** (kit for detecting alkaline phosphatase activity in leukocytes), **LeukoGnost ACP** (kit for acid phosphatase activity detection in leukocytes), **LeukoGnost NSE** (kit for detecting non-specific esterase activity in leukocytes), **LeukoGnost SPE** (kit for detecting specific esterase activity in leukocytes), **LeukoGnost PAS** (kit for detecting periodic acid and Schiff's reagent reaction in leukocytes).
- Mounting medium for covering microscopy sections, such as **BioMount Aqua**
- High-quality glass slides for use in histopathology and cytology, such as VitroGnost SUPER GRADE, VitroGnost COLOR or one of more than 30 models of BioGnost's VitroGnost glass slides
- VitroGnost cover glass, dimensions range from 18x18mm to 24x60mm
- BioGnost's immersion media, such as Immersion oil, Immersion oil, types A, C, FF, 37, or Immersion oil Tropical Grade

Staining procedure using LeukoGnost HEM reagent

Staining should be conducted according to the instructions for use for a specific kit from LeukoGnost range.
After the section is dried, it is recommended to mount the cover slide using BioMount Aqua medium to preserve color and section quality.

Result

Nuclei - blue
See instructions for use for a specific kit used from LeukoGnost range for other sections staining.

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 LeukoGnost HEM in a tightly sealed original packaging at temperature of +15°C to +25°C. Keep in dry plaes, do not freeze and avoid exposing to direct sunlight. Date of manufacture and expiry date are printed on the product's label.

References

1. Gill, G.W., Frost, J.K, Miller, K.A. (1974): A new formula for half-oxidized hematoxylin formula that neither overstains nor requires differentiation. *Acta Cytol.* 1974;18:300-301.
2. Gill, G.W. (2006): Enviro-Pap: an environmental friendly, economical, and effective Pap stain. *Lab. Med.* p37 105-108.
3. Papanicolaou, G.N. (1954): A new procedure for staining vaginal smears. *Science.* p95 438-439.
4. Sheehan, D.C. et Hrapchak, B.B. (1980): *Theory and Practice of Histotechnology*, 2nd ed., St. Louise: CV Mosby Co.

LKH-OT-X, V1-EN1, 22 December 2020, MŠ/IŠP

	Refer to the supplied documentation	°C	Storage temperature range	Σ	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						