BIOGNOST®

EOSIN Y 1% AQUEOUS

CE IVD *In vitro* diagnostic medical device Classified acc. to Regulation (EU) 2017/746 - **Class A** device

1% Eosin yellowish aqueous solution for counterstaining cytoplasm

More intense contrast cytoplasm staining reagent commonly used in classic hematoxylin and eosin staining (HE)

INSTRUCTIONS FOR USE

BASIC UDI number	385889212HPC30708STARVF	
EMDN code	W01030708	
REF **Catalog number**	**Volume**	**UDI-DI number**
EOY-10-OT-1L	1000 mL	03858888820091
EOY-10-OT-2.5L	2500 mL	03858888823467

Intended use and test principle

BioGnost's Eosin Y 1% is an aqueous reagent which is commonly used as a contrast dye for hematoxylin in the histological staining method, the hematoxylin and eosin (HE) staining. This method achieves better cellular structure visualization and differentiation. The microscopic samples' nuclei are stained blue using hematoxylin, then they are stained various shades of pink using cytoplasm eosin. Eosin Y is a fluorescein derivative. As color powder it can be used as a reagent mixture often used in histological, but also in cytological methods of staining, such as the Papanicolaou method in exfoliative cytology or for creating Romanowsky dyes. Eosin Y is anion dye which stains erythrocytes bright red, and it also stains basic cellular components, such as cytoplasm, collagen, and muscle fibers.

Product description

- **EOSIN Y 1% AQUEOUS** – Cytoplasmic counterstaining reagent. Contains stabilizers and a low concentration of fungicide

Additional reagents and materials that can be used in this method

- Fixatives such as BioGnost's neutral buffered formaldehyde solutions: Formaldehyde NB 4%, Formaldehyde NB 10%
- Dehydrating/rehydrating agent, such as BioGnost's alcohol solutions: Histanol 70, Histanol 80, Histanol 95 and Histanol 100
- Clearing agent, such as BioClear xylene or its aliphatic hydrocarbon substitutes, such as BioClear New
- Infiltration and embedding agent, such as BioGnost's granulated paraffin BioWax Plus 56/58, BioWax 56/68, BioWax Blue
- Covering agents for microscopic sections and mounting cover glass, such as BioGnost's BioMount, BioMount High, BioMount M, BioMount New, BioMount DPX, BioMount DPX High, BioMount DPX Low, BioMount C, BioMount Aqua
- VitroGnost slides and coverslips for use in histopathology and cytology
- BioGnost's immersion oils, such as Immersion oil, Cedarwood oil, Immersion oils types A and C, FF, 37 or Tropical Grade
- Nuclear staining reagents such as BioGnost's hematoxylin solutions: Hematoxylin (H, ML, G1, G2, G3 and Hematoxylin M)
- Differentiating reagent such as BioGnost's Acid alcohol
- Nuclear bluing reagents such as BioGnost's Bluing reagents or Scott's solution

Preparation of histological sections for staining

- Fix (Formaldehyde NB 4%, Formaldehyde NB 10%) and process the tissue sample
- Embed the tissue in a paraffin block (BioWax 52/54, BioWax 56/58, BioWax Plus 56/58, BioWax Blue)
- Cut the paraffin block into 4-6 μm thin slices and mount on a VitroGnost microscope slide

NOTE

Make sure that the part of the slide with the sample is fully immersed into the appropriate solution or reagent at every step

Hematoxylin and eosin (HE) manual* staining procedure, progressive

1.	Deparaffinize in xylene (BioClear) or xylene substitute (BioClear New)	3 exchanges, 2 min each
2.	Rehydrate in 100% alcohol (Histanol 100)	2 exchanges, 5 and 3 min
3.	Rehydrate in 95% alcohol (Histanol 95)	2 min
4.	Rehydrate in distilled/demineralized water	2 min
5.	Stain using Hematoxylin M, Hematoxylin ML, Hematoxylin G1, G2 or Hematoxylin H	3-5 min
	If sedimentation occurs or a metallic sheen forms in hematoxylin reagent, filter the reagent before use	
6.	Immerse the slidein distilled/demineralized water until dye is no longer being released from the slide	
7.	Make nuclei turn blue using Scott's solution or Bluing reagent	1 min
	Note: Finish the process of bluing after the nuclei turn blue. If no Scott's solution or Bluing reagent is available, rinse the slide under tap water for 3-5 minutes	
8.	Immerse in distilled water	
9.	Stain using Eosin 1% aqueous solution	up to 2 min
10.	Rinse under tap water	2 min
11.	Dehydrate in 95% alcohol (Histanol 95)	2 exchanges, 10-15 dips
12.	Dehydrate in 100% alcohol (Histanol 100)	3 exchanges, 10-15 dips
13.	Clear in xylene (BioClear) or xylene substitute (BioClear New)	2 exchanges, 2 min each

Immediately after clearing apply an appropriate BioMount medium for covering/mounting on the section. If BioClear xylene was used, use one of BioGnost's mounting xylene-based media (BioMount, BioMount High, BioMount M, BioMount DPX, BioMount C, or universal BioMount New). If BioClear New xylene substitute was used, the appropriate covering agent is BioMount New. Cover the section with VitroGnost cover glass.

***** Hematoxylin and eosin (HE) automatic staining procedure is available Instructions for use for the following BioGnost products: Hem Diff, Hem Diff Strong and BioBluing buffer.

Hematoxylin and eosin (HE) manual* staining procedure, regressive

1.	Deparaffinize in xylene (BioClear) or xylene substitute (BioClear New)	3 exchanges, 2 min each

2.	Rehydrate in 100% alcohol (Histanol 100)	2 exchanges, 5 and 3 min
3.	Rehydrate in 95% alcohol (Histanol 95)	2 min
4.	Rehydrate in distilled/demineralized water	2 min
5.	Stain using Hematoxylin ML, Hematoxylin G3 or Hematoxylin H	4-8 min
	If sedimentation occurs or a metallic sheen forms in hematoxylin reagent, filter the reagent before use	
6.	Immerse the slide in distilled/demineralized water until dye is no longer being released from the slide	
7.	Differentiate using Acid alcohol	3-10 dips
	Note: This step removes excessive hematoxylin from the nucleus and cytoplasm. Discoloration of the nuclei can occur if the slide is treated with the differentiation agent for too long.	
8.	Rinse in distilled/demineralized water	
9.	Make nuclei turn blue using Scott's solution or Bluing reagent	1 min
	Note: Finish the process of bluing after the nuclei turn blue. If no Scott's solution or Bluing reagent is available, rinse the sections under tap water for 3-5 minutes	
10.	Immerse in distilled/demineralized water	
11.	Stain using Eosin 1% aqueous solution	up to 2 min
12.	Rinse under tap water	2 min
13.	Dehydrate in 95% alcohol (Histanol 95)	2 exchanges, 10-15 dips
14.	Dehydrate in 100% alcohol (Histanol 100)	3 exchanges, 10-15 dips
15.	Clear in xylene (BioClear) or xylene substitute (BioClear New)	2 exchanges, 2 min each

Immediately after clearing apply an appropriate BioMount medium for covering/mounting on the section. If BioClear xylene was used, use one of BioGnost's mounting xylene-based media (BioMount, BioMount High, BioMount M, BioMount DPX, BioMount C, or universal BioMount New). If BioClear New xylene substitute was used, the appropriate covering agent is BioMount New. Cover the section with VitroGnost cover glass.
***** Hematoxylin and eosin (HE) automatic staining procedure is available Instructions for use for the following BioGnost products: Hem Diff, Hem Diff Strong and BioBluing buffer.

Result

Nuclei – blue
Cytoplasm, collagen, muscle fibers, erythrocytes – hues of pink

Limitations

This product is intended for professional laboratory use for diagnostic purposes only. Deviations from the staining procedure described in this Instruction for use may cause differences in staining results.

Sample preparation and diagnostics

Use only appropriate instruments for collecting and preparing the samples. Process the samples using modern technology and mark them clearly. Be sure to follow the manufacturer's handling instructions. To avoid errors, staining and diagnosis can only be carried out by qualified personnel. Use a microscope equipped according to medical diagnostic laboratory standards.
If a serious incident occurs during use of this product or as a result of its use, please report it to the manufacturer or authorized representative and competent authority.

Safety at work and environmental protection

Handle the product in accordance with occupational health and environmental protection guidelines. Used and expired solutions must be disposed of as special waste following national guidelines. Reagents used in this procedure can pose a danger to human health. The examined tissue samples are potentially infectious, and it is necessary to take the measures needed to protect human health in accordance with the guidelines of good laboratory practice. It is mandatory to read and act according to the information and warning signs printed on the product label and in the Safety Data Sheet, which is available on request.

Storage, stability, and shelf life

Upon receipt, store the product in a dry place and well-closed original packaging at a temperature of +15 °C to +25 °C. Do not freeze or expose to direct sunlight. After first opening, the product can be used until the specified expiry date, if stored properly. The expiration date is printed on the product label.

References

1. Bruce-Gregorios, J.H. (1974): Histopathologic Techniques, IMC Press Inc., Quezon City, Philippines.
2. Cook, D.J. (2009): Cellular Pathology: An introduction to techniques and applications. 2nd ed., Scion Publishing Ltd., Bloxham.
3. Gurr, E. (1971): Synthetic dyes in biology, medicine and chemistry. Academic Press, London.

Warnings and precautions regarding the materials contained in the product:
Not a hazardous substance or mixture acc. to Regulation (EZ) br. 1272/2008.

EOY-10-IFU_ENV10, 23.02.2026., IŠP

	Manufacturer	LOT	Batch code		Consult Instructions for use	CE	European conformity
	Date of manufacture	REF	Catalogue number		Caution	UDI	Unique device identifier
	Use-by date	°C	Temperature limit	IVD	*In vitro* diagnostic medical device		

BioGnost Ltd.
Medjugorska 59, 10040 Zagreb, Croatia, EU, www.biognost.com

Version	Description / reason for change	Date
10	Revised acc. to Regulation (EU) 2017/746 - IVDR	23.02.2026.