

GOMORI TRICHROME KIT



IVD *In vitro* diagnostic medical device

Classified acc. to Regulation (EU) 2017/746 - Class A device

Five-reagent muscle and collagen fiber staining kit

INSTRUCTIONS FOR USE

BASIC UDI number	385889212HPC30708STARVF		
EMDN code	W01030708		
REF	Catalog number	Volume	UDI-DI number
GT-100T		For 100 tests	03858892125878
GT-K-100		4x100 mL	03858892125885



Intended use and test principle

Gomori Trichrome kit is used for analysis of collagen fibers in liver and kidneys, in order to achieve easier differentiation of collagen and smooth muscle fibers, as well as for ragged red fibers (present in cases of mitochondrial myopathies). Gomori trichrome kit allows differentiation of muscle fibers, collagen and nuclei. Bouin's solution acts as a mordant, improving fixation and tissue affinity towards dyes. Hematoxylin, Weigert permanently stains nuclei with a dark dye that can not be washed away with acidic solutions. Chromotrope 2R permeates the densely packed muscle fibers and stains them red. The larger molecule of Aniline Blue stains collagen fibers blue. The final differentiation removes excessive dye and ensures a clear distinction between muscle tissue, collagen and nuclear structures.

Product description

- **GOMORI TRICHROME KOMPLET**- Five-reagent kit for staining collagen and muscle fibers

The kit contains:	100 tests (GT-100T)	5 x 100 mL (GT-K-100)	Storage temperature
Bouin's solution	BOU-OT-30 (30 mL)	BOU-OT-100 (100 mL)	15-25°C
Hematoxylin, Weigert A	HEMA-OT-30 (30 mL)	HEMA-OT-100 (100 mL)	15-25°C
Ferri reagent, Weigert B	FR-OT-30 (30 mL)	FR-OT-100 (100 mL)	15-25°C
Chromotrope 2R/Aniline Blue reagent	CABR-OT-30 (30 mL)	CABR-OT-100 (100 mL)	15-25°C
Differentiating reagent for Gomori trichrome kit	RDG-OT-30 (30 mL)	RDG-OT-100 (100 mL)	15-25°C

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

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 μ m thin slices and mount on a VitroGnost microscope slide

NOTE

Apply the reagent so it completely covers the section.

Histological sample staining procedure

a) using kit for 100 tests (GT-100T)

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 Bouin's solution	60 min at 56°C or at room temperature overnight
6.	Cool the slide to room temperature	10 min
7.	Rinse under tap water	10 sec
8.	Rinse in distilled/demineralized water	10 sec
9.	Stain using Hematoxylin, Weigert A (5 drops) and Ferri reagent, Weigert B (5 drops). Stir and let it react	5-10 min
10.	Rinse under tap water	5 min
11.	Stain using Chromotrope 2R/Aniline Blue reagent (≥ 5 drops)	3-5 min
12.	Rinse in distilled/demineralized water	5 dips
13.	Treat with Differentiating reagent for Gomori Trichrome kit (≥ 5 drops)	2 min
14.	Rinse in distilled /demineralized water	5 dips
15.	Dehydrate in 70% alcohol (Histanol 70)	5 dips
16.	Dehydrate in 95% alcohol (Histanol 95)	5 dips
17.	Dehidracija u 100%-tnom alkoholu (Histanol 100)	2 min
18.	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.

b) using five-reagent kit, 100 mL (GT-K-100)

Pour the reagents into glass staining jars (Coplin, Hellendahl or Schifferdecker), return to original bottles after staining. Close tightly. Filter the reagents if necessary.

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 Bouin's solution	60 min at 56°C or at room temperature overnight
6.	Cool the slide at room temperature	10 min
7.	Rinse under tap water	10 sec

8.	Rinse in distilled/demineralized water	10 sec
	Prepare Weigert hematoxylin working solution: mix equal volumes of Hematoxylin, Weigert A and Ferri reagent, Weigert B Note: the working solution is stable for about 2 weeks. Prepare the working solution of volume adequate for staining test slides	
9.	Immerse into Weigert hematoxylin working solution and let it react	5-10 min
10.	Rinse under tap water	5 min
11.	Immerse into Chromotrope 2R/Aniline Blue reagent	3-5 min
12.	Rinse in distilled/demineralized water	5 dips
13.	Immerse into Differentiating reagent for Gomori trichrome kit	2 min
14.	Rinse in distilled/demineralized water	5 dips
15.	Dehydrate in 70% alcohol (Histanol 70)	5 dips
16.	Dehydrate in 95% alcohol (Histanol 95)	5 dips
17.	Dehydrate in 100% alcohol (Histanol 100)	2 min
18.	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.

Result

Collagen – blue
Muscle tissue – pink
Nuclei – red to purple
Erythrocytes – red to orange

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. To avoid an incorrect staining result, it is advised to use a positive and negative control.

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

- Bancroft, J.D., Gamble, M. (2002), Theory and practice of Histological Techniques, Churchill Livingstone, New York.
- Prophet, Mills, Arrington, Sobin (1968), Laboratory methods in histotechnology. Stain methods of the Arm Forces Institute of Pathology, Washington D.C.
- Carson, F. L. (1997), Histotechnology: a self-instructional text. American Society for Clinical Pathology (2nd edition), Singapore.

Warnings and precautions regarding the materials contained in the product:

	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.. H225 Highly flammable liquid and vapor. H335 May cause respiratory irritation. H341 Suspected of causing genetic defects. H350 May cause cancer. H302+H312+H332 Harmful if swallowed, if on skin or if inhaled.
	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 IF ON SKIN: wash with plenty of water. P304+P340 IF INHALED: remove person to fresh air and keep comfortable for breathing. P308+P313 IF exposed or concerned: get medical advice/attention. P333+P313 IF skin irritation or rash occurs: get medical advice/attention. P301+P330+P331 IF SWALLOWED: rinse mouth, do NOT induce vomiting. P305+P351+P338 IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

GT-IFU_ENV8, 24.02.2026., IŠP

 Manufacturer	 Batch code	 Consult instructions for use	 Contains sufficient for <n> tests	 Contains hazardous substances
 Date of manufacture	 Catalogue number	 Caution	 European conformity	
 Use-by date	 Temperature limit	 <i>In vitro</i> diagnostic medical device	 Unique device identifier	

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Version	Description / reason for change	Date
8	Revised in acc. to Regulation (EU) 2017/746 - IVDR	24.02.2026.