

# MGG Quick Stain (for smear), Kit

Reference: AP0367



1 of 2

## INTENDED USE AND PRESENTATION:

For *in vitro* diagnostic use.

AP0367. 200 Tests.

## APPLICATIONS:

The MGG Quick Stain (for smear) kit was designed as a quick method for differential staining of formed blood elements. It can also be used to stain other types of air-dried smears (sediment smears, needleaspirates).

The interpretation of the stain results is the full responsibility of the user. Any experimental result must be confirmed by a medically established diagnostic product or procedure.

## PRODUCT COMPOSITION:

The MGG Quick Stain (for smear) kit is composed by:

Reagent	Name	Volume	Storage
A	Fixative solution	100 mL	15-25 °C
B	Eosine modified solution	100 mL	15-25 °C
C	Blue modified solution	100 mL	15-25 °C

## METHODS AND PROCEDURE:

**Principles of the method:** Solutions in this kit contain the same dye as traditional May Grunwald and Giemsa solutions. Thanks to their high degree of dissociation, active molecules (eosine and Blue dyes) can be absorbed by cellular structures very quickly.

Warning:

- It is important to immerse and extract specimen as requested in the method. A continuous permanence in the solution does not guarantee good staining results.

- If the final staining shows unbalance between eosinophil and basophil components It is necessary to verify pH of washing water. If this value is very different from neutrality (pH 7), we advise to use a buffer (ex. phosphate buffer pH 7).

**Procedure time:** 20 seconds.

### Staining procedure:

#### Blood smear

- 1) Dip the slide 5 times for 1 second into **Reagent A**. Drain the surplus onto filter paper.
- 2) Dip the slide 5 times for 1 second into **Reagent B**. Drain the surplus onto filter paper.
- 3) Dip the slide 5 times for 1 second into **Reagent C**. Drain the surplus onto filter paper.
- 4) Briefly wash in running water to remove excess and dip into alcohol 5-6 times.

#### Malaria (Plasmodium)

- 1) Dip the slide 3 times for 1 second into **Reagent A**. Drain the surplus onto filter paper.
- 2) Dip the slide 2 times for 1 second into **Reagent B**. Drain the surplus onto filter paper.
- 3) Dip the slide 2 times for 1 second into **Reagent C**. Drain the surplus onto filter paper.
- 4) Briefly wash in running water to remove excess and dip into alcohol 5-6 times.

#### Cytological of fluid and fine-needle puncture

- 1) Dip the slide 5 times for 1 second into **Reagent A**. Drain the surplus onto filter paper.
- 2) Dip the slide 5 times for 1 second into **Reagent B**. Drain the surplus onto filter paper.
- 3) Dip the slide 10 times for 1 second into **Reagent C**. Drain the surplus onto filter paper.
- 4) Wash in running water to remove excess and dip into alcohol 5-6 times.

#### Histological slides

- 1) Dip the slide 10 times for 1 second into **Reagent A**. Drain the surplus onto filter paper.
- 2) Dip the slide 15 times for 1 second into **Reagent B**. Drain the surplus onto filter paper.
- 3) Dip the slide 15 times for 1 second into **Reagent C**. Drain the surplus onto filter paper.
- 4) Dehydrate and mount.

#### Pneumocystis carinii, Cryptosporidia, Leishmania, Cryptococcus, Microfilaria, Toxoplasma

- 1) Dip the slide 10 times for 1 second into **Reagent A**. Drain the surplus onto filter paper.
- 2) Dip the slide 10 times for 1 second into **Reagent B**. Drain the surplus onto filter paper.
- 3) Dip the slide 10 times for 1 second into **Reagent C**. Drain the surplus onto filter paper.
- 4) Briefly wash in running water to remove excess and dip into alcohol 5-6 times.

#### Frozen tissue section

- 1) Dip the slide 10 second in **Reagent A**. Drain the surplus onto filter paper.
- 2) Dip the slide 15 second in **Reagent B**. Drain the surplus onto filter paper.
- 3) Dip the slide 20 second in **Reagent C**. Drain the surplus onto filter paper.



Catalog number



Batch code



In Vitro diagnostic medical device



Temperature limitation



Expiration date



Test number



Manufacturer



See instruction for use



Gennova Scientific, S.L.  
C/ Johann Gutenberg, 4F. Pol. Ind.  
El Caamo I • 41300 San Jose  
de La Rinconada • Sevilla, SPAIN  
Telefono: +34 954 150767  
Fax: +34 955 266494

[info@gennovalab.com](mailto:info@gennovalab.com)  
[www.gennova-europe.com](http://www.gennova-europe.com)

# **MGG Quick Stain (for smear), Kit**

Reference: AP0367



2 of 2

4) Dehydrate and mount.

See our web site at [www.gennova-europe.com](http://www.gennova-europe.com) for detailed protocols ancillary reagents and support products.

## **EXPECTED RESULTS:**

During the reaction of the different solutions of the kit with the tissue sections, resulting comparable to the May Grunwald-Giemsa technique:

Blood cells, Nuclei	Chromatin	Purple
Leucocytes	Cytoplasm without ARN Eosinophilic granules Basophilic granules Neutrophilic granules	Light pink Orange brown Dark purplish blue Purple +/- intense
Lymphocytes	Cytoplasm with ARN Cytoplasm without ARN Azurophilic granules	Blue Light blue Red
Monocytes	Cytoplasm	Grey-blue
Erythrocytes		Light red
Platelets	Chromomer Hyalomere	Purplish red Bluish
Blood parasites (Malaria)	Nucleus Cytoplasm	Red Blue

## **REQUIRED MATERIALS BUT NOT SUPPLIED:**

All reagents, materials, and laboratory equipment for this procedure are not provided with this kit. This includes adhesive slides and cover slips, positive and negative control tissues, xylene or adequate substitute, ethanol, distilled H<sub>2</sub>O, pipettes, Coplin jars, glass jars, moist chamber, histological baths, mounting materials, and microscope.

Buffered solutions for and other auxiliary reagents are available from Genova Scientific.

## **STORAGE AND STABILITY:**

Store at 15-25 °C until the expiration date printed on product label. Do not use after the expiration date. Keep the containers tightly closed. After the first opening, the product is usable until the expiry date stated on label of intact product. Waste from solutions must be disposed under the procedure of hazardous substance. If the product is stored under different conditions from those stipulated in these technical indications, the new conditions must be verified by the user.

Genova Scientific guarantees that the product will maintain all of the described characteristics from the production date until the expiration date, as long as the product is stored and used as recommended. No other guarantees are provided. Under no circumstances is Genova Scientific obliged to cover damages caused by use of this reagent.

## **TROUBLESHOOTING:**

If unusual staining is observed or any other deviations from the expected results, please read these instructions carefully, and if this does not solve the problem, please contact Genova Scientific's technical support department or your local distributor.

## **PRECAUTIONS:**

Use only by qualified personnel. Read with attention the information written on the label (dangerous symbols, risks and safety phrases). Consult always the safety data sheet (MSDS) where the information about the risks of the preparation, precautionary measures during use, first aid and disposal are available. Use proper protective equipment in order to avoid contact with reagents and samples in the eyes, skin, and mucosal tissues. MSDS is available upon request.

## **PERFORMANCE CHARACTERISTICS:**

Genova Scientific has performed studies to evaluate the functioning of this product, concluding that the product is both specific and sensitive for recommended use.

## **BIBLIOGRAPHY:**

Advanced Laboratory Methods in Histology and Pathology 1994: 207-231. Armed Forces Institute of Pathology. American Registry of Pathology. Washington, DC .

F01IT04\_V1R0212\_AP0367\_English



Catalog number



Batch code



In Vitro diagnostic medical device



Temperature limitation



Expiration date



Test number



Manufacturer



See instruction for use



**Genova Scientific, S.L.**  
C/ Johann Gutenberg, 4F. Pol. Ind.  
El Caamo I • 41300 San Jose  
de La Rinconada • Sevilla, SPAIN  
Telefono: +34 954 150767  
Fax: +34 955 266494

[info@gennovalab.com](mailto:info@gennovalab.com)  
[www.gennova-europe.com](http://www.gennova-europe.com)