

# **Perls (method for ferric iron), Kit**

Reference: AP0373



1 of 2

## **INTENDED USE AND PRESENTATION:**

For *in vitro* diagnostic use.

AP0373. 100 Tests.

## **APPLICATIONS:**

The Perls (method for ferric iron) kit was designed to show reactive ferric iron in tissue sections, for hematology and cytology.

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 Perls (method for ferric iron) kit is composed by:

Reagent	Name	Volume	Storage
A	Hydrochloric acid solution	30 mL	15-25 °C
B	Potassium ferrocyanide solution	30 mL	15-25 °C
C	Nuclear Fast Red solution	30 mL	15-25 °C

## **METHODS AND PROCEDURE:**

**Principles of the method:** The basis for the method is the release of ferric iron from hemosiderin by acid treatment, forming ferric chloride. The ferric iron reacts with potassium ferrocyanide to form ferric ferrocyanide. This staining is used to assess iron stores. This is often done with bone marrow sections and aspirate smears. It is also used to demonstrate hemosiderin at the site of old hemorrhage and to identify hemochromatosis and cirrhosis.

**Specimen:** Paraffin-embedded tissue samples should be used, but can also be used in hematology and cytology extensions.

**Procedure time:** 35 minutes.

### **Staining procedure:**

- 1) Deparaffinize and hydrate for paraffin section.
- 2) Put the slide in distilled water.
- 3) Mixing **Reagent A** and **Reagent B** in equal parts and incubate for 30 minutes.
- 4) Rinse in distilled water.
- 5) Counterstained with **Reagent C** for 10 minutes.
- 6) Rinse in distilled water.
- 7) Dehydrate in alcohols of increasing clear in xylene and mount preparation.

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 in the following stains:

Ferrous salt	Blue
Nucleus	Red

## **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



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)

# **Perls (method for ferric iron), Kit**

Reference: AP0373



2 of 2

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:**

Gomori G. Microtechnical demonstration of iron, a criticism of its methods. Am J Path 1936; 12: 655-663.  
Laufberger V. Sur la cristallisation de la ferritine. Bull Soc chim Biol 1937; 19: 1575-1582.  
Perls M. Nachweis von eisenoxyd in gewissenen Pigmenten. Virchow's Arch Path und Physiol und Klin Med 1867; 39: 42-48.

F01IT04\_V1R0512\_AP0373\_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)