



<b>Instructions For Use</b>		
<b>IRN-2-IFU</b>		
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P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - [www.scytek.com](http://www.scytek.com)

# Iron Stain Kit

**Description:**

The Iron Stain Kit is intended for use in the detection of ferric iron in tissues, blood smears, or bone marrow smears. Ferric iron is normally found in small amounts in bone marrow and the spleen. Abnormally large deposits may be seen in hemochromatosis and hemosiderosis. This product is based on the Prussian Blue reaction in which ionic iron reacts with acid ferrocyanide producing a blue color.

**Tissue Sections**

Iron: Bright Blue  
 Nuclei: Red  
 Background: Pink

**Bone or Blood Smears**

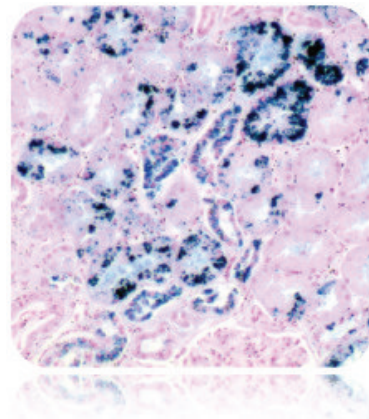
**Sideroblasts:** These are nucleated erythrocytes containing at least one small blue granule. If the blue granules surround the nucleus, the cell is a ringed sideroblast.

**Siderocytes:** These are non-nucleated erythrocytes containing at least one blue granule.

**Reticuloendothelial Iron:** Usually seen as blue particles on the marrow smear or as blue particles in the cytoplasm or phagocytic cells.

**Uses/Limitations:**

Not to be taken internally.  
 For In-Vitro Diagnostic use.  
 Histological applications.  
 Do not use if reagents become cloudy.  
 Do not use past expiration date.  
 Use caution when handling reagents.  
 Non-Sterile.



**Control Tissue:**

Spleen  
 Bone Marrow

**Ordering information regarding individual components on back page!**

**Kit Contents:**

<u>Item #</u>	<u>Kit Contents</u>	<u>Volume</u>	<u>Storage</u>
PFB030	Potassium Ferrocyanide Solution	30 ml	18-25°C
HQB030	Hydrochloric Acid Solution (2%)	30 ml	18-25°C
NFS030	Nuclear Fast Red Solution	30 ml	18-25°C
	Graduated Mixing Vial	1 ea	

**Precautions:**

Avoid contact with skin and eyes.  
 Harmful if swallowed.  
 Follow all Federal, State, and local regulations regarding disposal.

Storage: 18° C



25° C



ScyTek Laboratories, Inc.  
 205 South 600 West  
 Logan, UT 84321  
 U.S.A.



EmergoEurope (31)(0) 70 345-8570  
 Molsstraat 15  
 2513 BH Hague, The Netherlands

## Procedure:

**Note:** Use acid-washed or bleach-washed glassware.  
Rinse all glassware with distilled water prior to use.  
Do not use metal forceps to transfer slide during staining procedure.

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. Mix an equal number of drops each of Potassium Ferrocyanide Solution and Hydrochloric Acid Solution in the enclosed graduated vial to make a working Iron Stain Solution. Use once and discard.
3. Apply 5-10 drops of mixed Iron Stain Solution to tissue section and incubate for 3-5 minutes.
4. Rinse thoroughly in distilled water.
5. Apply 5-10 drops of Nuclear Fast Red Solution to tissue section and incubate for 5 minutes.
6. Rinse in 4 changes of distilled water.
7. Dehydrate in 3 changes of absolute alcohol for 2 minutes each.
8. Clear, and mount in synthetic resin.

## References:

1. Sheenan, D.C., Hrapchak, B.B. Theory and Practice of Histotechnology, 2<sup>nd</sup> Edition. Battelle Press, Columbus, OH. Page 217. 1980
2. Carson, F.L., Histotechnology; A Self-Instructional Text, ASCP Press, Chicago, IL. Pages 214-215. 1990

## Bulk Reagent Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)

Description:	Catalog #	Volume
Potassium Ferrocyanide Solution	PFB500	500 ml
	PFB999	1000 ml
Hydrochloric Acid Solution (2%)	HQB500	500 ml
	HQB999	1000 ml
Nuclear Fast Red Solution (Enhanced Stability)	NFS125	125 ml
	NFS500	500 ml
	NFS999	1000 ml

Storage: 18° C



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