



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

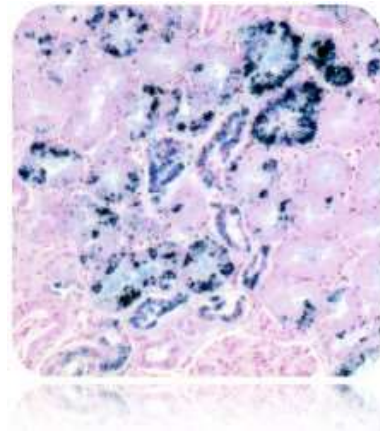
Sideroblasts: These are nucleated erythrocytes containing at least one small blue granule. If the blue granules surround the nucleus, the cell is a ringed sideroblast.

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 only.
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



Kit Contents:

<u>Kit Contents</u>	<u>Volume</u>	<u>Storage</u>
Potassium Ferrocyanide Solution	500 ml	18-25°C
Hydrochloric Acid Solution (2%)	500 ml	18-25°C
Nuclear Fast Red Solution	125 ml	18-25°C

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

Storage: 18° C  25° C

**SS1013-VO****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 equal volumes of Potassium Ferrocyanide Solution and Hydrochloric Acid Solution to make a working Iron Stain Solution. Use once and discard.
3. Incubate slide in working Iron Stain Solution for 3-5 minutes.
4. Rinse thoroughly in distilled water.
5. Stain slide in Nuclear Fast Red Solution 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, 2nd 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

Description:	Volume
Potassium Ferrocyanide Solution	500 ml 1000 ml
Hydrochloric Acid Solution (2%)	500 ml 1000 ml
Nuclear Fast Red Solution (Enhanced Stability)	125 ml 500 ml 1000 ml

Storage: 18° C  25° C