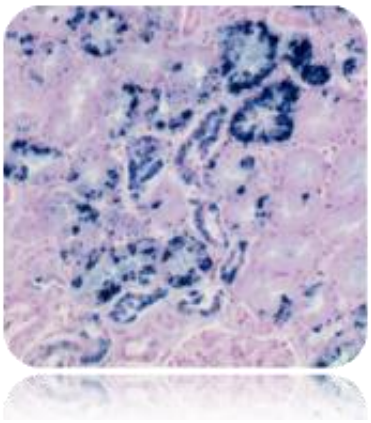
Iron Stain Kit

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.

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



Results:

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.

Kit Contents:

Item #	Kit Contents	Volume	Storage
SSC-PFB500	Potassium Ferrocyanide Solution	500 ml	18-25°C
SSC-HQB500	Hydrochloric Acid Solution (2%)	500 ml	18-25°C
SSC-NFS125	Nuclear Fast Red Solution	125 ml	18-25°C

For information regarding ordering individual components, please contact us at: 800-442-3573.
Control Slides Available. Catalog: CS-IRON(B)/25 or CS-IRON(L)/25, Iron, 25/kit, B=Bone Marrow, L=Liver

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

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

Lot-to-Lot Validation Form
Iron Stain Kit Catalog: SSK-IRON

Kit Lot Number: _____

Kit Expiration Date: _____

Date Tested: _____

Control Tissue (#) _____

Approved for Use: Y/N _____

Date put into use:

If not approved, corrective actions taken:	

Approved by: _____

Kit Component	**Lot #**
Potassium Ferrocyanide	
Hydrochloric Acid (2%)	
Nuclear Fast Red	

Replacement Component if used	Replacement Date	Lot #	Accepted Y/N	Comments
Potassium Ferrocyanide				
Hydrochloric Acid (2%)				
Nuclear Fast Red				
Approved By:				

StatLab is providing this form to assist with reagent lot validation as stated in CLIA'88 Standard 493.1256-For reagent(s), the laboratory must do the following: Check each batch (prepared in-house), lot number (commercially prepared) and shipment of reagents, stains, and identification systems (systems using two or more substrates or two or more reagents, or a combination) when prepared or opened for positive and negative reactivity, if applicable.