

## Lillies Method For Ferric and Ferrous Iron

**Catalog Number: 26604-Series**

### Fixation:

10% Buffered Neutral Formalin (#15740).

### Sections:

Paraffin @ 6 microns

### Staining Procedures:

(Use control slide. Use chemically clean glassware)

### Preparation of Potassium Ferrocyanide Solution:

Prepare fresh, just before use

- Potassium Ferrocyanide (#26604-01) - 0.4 g
- Hydrochloric Acid (#26604-02) - 40.0 ml

### Preparation of Potassium Ferricyanide Solution:

Prepare fresh just before use.

- Potassium Ferricyanide (#26604-1A) - 0.4 g
  - Hydrochloric Acid (#26604-02) - 40.0 mg
1. Deparaffinize and hydrate to distilled water.
  2. For Ferric Iron, place in Potassium Ferrocyanide Solution for 1 hour. For Ferrous Iron, place in Potassium Ferricyanide Solution for 1 hour.
  3. Wash in Acetic Acid, 1% (#26604-04).
  4. Stain for 10 minutes in Basic Fuchsin Solution (#26604-03). Rinse in distilled water, (For critical work, omit this step).
  5. Dehydrate in 95% alcohol, absolute alcohol and clear in xylene, two changes each.
  6. Mount with Permount (#17986-01)

### Stain Results:

Ferric Iron	Dark Prussian' Blue
Ferrous Iron	Dark Turnbull's Blue
Background	Light Red

### References:

Lillie, R.D., Histopathologic Technic and Practical Histochemistry, 3rd ed. McGraw-Hill, N.Y., p.407, c 1965.  
Luna, L.G. (ed). Manual of Histologic Staining Methods of the Armed Forces Institute of Pathology, 3rd ed., McGraw-Hill, N.Y., c. 1968, p.182.