

**LILLIE'S METHOD FOR TURNBULL'S BLUE REACTION**

<b>PURPOSE:</b>	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of ferrous iron in tissue.
<b>PRINCIPLE:</b>	In an acid medium, ferrous iron is able to reduce the Ferricyanide Solution to Turnbull's Blue and bind it selectively. Ferric iron cannot do this.
<b>CONTROL:</b>	Any tissue known to contain iron <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs007.</i>
<b>SPECIMEN PREPARATION:</b>	Formalin fixed, paraffin embedded sections cut at 6 micrometers
<b>SOLUTIONS:</b>	1. Hydrochloric Acid – Potassium Ferricyanide Set Item# s2341 <i>Working Solution: Make fresh before use.</i> Potassium Ferricyanide ..... 400 mg 0.06 N Hydrochloric Acid.....40 mL 2. Hydrochloric Acid 0.01 N Aqueous Item# s1829 3. Basic Fuchsin 0.5% in 1% Acetic Acid Item# s2343  <i>Solutions can be purchased separately from Poly Scientific.</i>
<b>NOTES:</b>	For critical work omit counterstain.
<b>REFERENCE:</b>	Luna, Lee G. <u>Histopathologic Methods and Color Atlas of Special Stains and Tissue Artifacts</u> . American Histolabs Inc. Gaithersburg, MD. 1992. pp. 323-333.

**STAINING PROCEDURE:**

1. Deparaffinize and hydrate to distilled water.
2. Immerse slides in a fresh solution of Potassium Ferricyanide in 0.06 N Hydrochloric Acid for 1 hour.
3. Wash slides in Hydrochloric Acid 0.01 N Aqueous.
4. Stain 5-10 minutes in Basic Fuchsin 0.5% in 1% Acetic Acid.
5. Wash in distilled water.
6. Dehydrate, clear in Xylene and mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

**RESULTS:**

Iron (Ferrous Form) .....Bright Blue  
Background .....Pink-Red

*Poly Scientific R&D Corp.*

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