

**FITE'S METHOD FOR ACID FAST ORGANISMS**

<b>PURPOSE:</b>	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of M. Leprae.
<b>PRINCIPLE:</b>	The Carbol Fuchsin dissolves into the bacterial capsule by temporarily weakening the lipid shell and is able to resist differentiation by Acid Alcohol.
<b>CONTROL:</b>	Any tissue known positive for M. Leprae <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs003.</i>
<b>SPECIMEN PREPARATION:</b>	Formalin fixed, paraffin embedded sections cut at 6 micrometers
<b>SOLUTIONS:</b>	1. Xylene Peanut Oil 2:1 Fite's Method Item# s1912A 2. Carbol Fuchsin Ziehl-Neelsen Item# s162 3. Acid Alcohol 1% Item# s104 4. Methylene Blue Working Item# s188B  <i>Solutions can be purchased separately from Poly Scientific.</i>
<b>NOTES:</b>	
<b>REFERENCE:</b>	Luna, Lee G. <u>Manual of Histologic Methods of the Armed Forces Institute of Pathology</u> . 3rd Ed. McGraw-Hill Book Co. New York. 1968. p. 218.

**STAINING PROCEDURE:**

1. Deparaffinize through 2 changes of Xylene Peanut Oil Solution for 12 minutes each.
2. Drain, wipe off excess oil and blot to opacity. The residual oil helps prevent shrinkage and injury of section.
3. Carbol Fuchsin Ziehl-Neelsen Solution for 30 minutes.
4. Wash in water for 3 minutes.
5. Differentiate slides individually with Acid Alcohol 1% until sections are pink.
6. Wash in running water for 3 minutes.
7. Counterstain lightly with Methylene Blue Working Solution.
8. Rinse off excess Methylene Blue in water.
9. Blot and let stand for a few minutes to air dry thoroughly.
10. Dip slides in Xylene before mounting.
11. Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

**RESULTS:**

Acid Fast Bacilli..... Red  
 Nocardia Filaments..... Red  
 Lepra Bacilli..... Red  
 Background ..... Pale Blue

*Poly Scientific R&D Corp.*

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