

ZIEHL-NEELSEN METHOD FOR ACID FAST BACTERIA

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of acid fast organisms.
PRINCIPLE:	The staining solution is able to temporarily weaken the lipid shell of certain organisms and dissolve into it. The Acid Alcohol is unable to destain these organisms but it does destain all non acid fast organisms.
CONTROL:	Any tissue known positive for acid fast organisms <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs003.</i>
SPECIMEN PREPARATION:	Any well-fixed tissue, paraffin embedded sections cut at 6 micrometers
SOLUTIONS:	1. Carbol Fuchsin Ziehl Neelsen Item# s162 2. Acid Alcohol 1% Item# s104 3. Methylene Blue Working Item# s188B <i>Solutions can be purchased separately from Poly Scientific.</i>
NOTES:	Fast Green Substitute for Light Green Working Solution Item# s232B could be used as an alternate counterstain.
REFERENCE:	Clark, George. <u>Staining Procedures</u> . 4th Ed. Williams & Wilkins. Baltimore, MD. 1981. p. 380.

STAINING PROCEDURE:

1. Deparaffinize and hydrate to distilled water.
2. Carbol Fuchsin Ziehl Neelsen for 30 minutes.
3. Wash well in running water.
4. Decolorize with Acid Alcohol 1% until sections are pale pink.
5. Wash thoroughly in running water for 8 minutes.
6. Counterstain by dipping one slide at a time in Methylene Blue Working. Sections should be pale blue.
7. Rinse in distilled water.
8. Dehydrate in 95% Alcohol, Absolute Alcohol and clear in Xylene, 2 changes each.
9. Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

RESULTS:

Acid Fast Bacilli.....Bright Red
 ErythrocytesYellowish Orange
 Other Tissue ElementsPale Blue

Poly Scientific R&D Corp.

Revision: B-18

