

TRICHROME STAIN METHOD FOR INTESTINAL PROTOZOA

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative diagnostic demonstration of intestinal protozoa.
PRINCIPLE:	Iodine is used to remove the mercury from the tissue. An acid dye is applied to the section which binds all acidophilic elements including both collagen and muscle. The Phosphotungstic Acid then displaces the acid dye from the collagen. Collagen is more permeable than cytoplasm and thus the large phosphotungstic molecule cannot displace the acid dye from the cytoplasm. It also acts as a mordant for the Light Green to bind to collagen.
CONTROL:	Tissue known positive for protozoa <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs027.</i>
SPECIMEN PREPARATION:	Zinc Formalin fixed, cut sections at 5 micrometers Fresh specimen should be used for optimum results
SOLUTIONS:	1. Iodine Alcohol For Trichrome Item# s2030 2. Acid Alcohol Trichrome Stain Item# s2031 3. Carbol Xylene For Intestinal Protozoa Trichrome Item# s2032 4. Gomori's One Step Trichrome With Light Green Item# s1815 <i>Solutions can be purchased separately from Poly Scientific.</i>
NOTES:	
REFERENCE:	Frankel, S. et al. <u>Gradwohl's Clinical Laboratory Methods and Diagnosis</u> . 7th Ed. C.V. Mosby Co. St Louis, MO. 1970. pp. 1760-1761.

STAINING PROCEDURE:

Staining technique with fresh specimen:

Note: DO NOT let smear dry.

1. Zinc Formalin for 5 minutes at 50°C or 1 hour at room temperature.
2. Rinse in water.
3. Gomori's One Step Trichrome Stain for 8 minutes.
4. Acid Alcohol for 10 seconds total.
5. 95% Alcohol, rinse briefly.
6. 100% Alcohol or Carbol Xylene for 1 minute.
7. Xylene, 2 changes.
8. Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

Staining technique with PVA films:

Note: Films should be allowed to dry thoroughly either overnight at room temperature or in a 37°C incubator.

1. Rinse in water for 3-5 minutes.
2. Gomori's One Step Trichrome Stain for 8 minutes.
3. Acid Alcohol for 10 seconds.
4. 95% Alcohol, rinse to remove acid.
5. 95% Alcohol for 5 minutes.
6. Carbol Xylene for 1 minute.
7. Xylene, 2 changes.
8. Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

RESULTS:

Cytoplasm of Cysts & TrophozoitesBlue-Green Tinged with Purple
Nuclear Chromatin, Chromatoid Bodies,
Ingested Red Cells & Bacteria.....Red or Purplish Red
Background MaterialGreen
Other Ingested Particles Such as Yeast or MoldsGreen

Poly Scientific R&D Corp.

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