

Wolbach's Giemsa Method

Catalog #: 26773-Series

Fixation:

Zenker's or other well fixed tissue fixatives.

Sections:

Paraffin @ 6 microns.

Staining Procedures:

1. Deparaffinize and hydrate to distilled water.
2. Remove "Zenker Crystals" by placing in Lugol's Iodine (#26773-03) or Gram's Iodine (#26773-3A) for 15 minutes. Rinse in water, place in Sodium Thiosulfate, 5% (#26773-04) for 3 minutes and wash in running water for 15 minutes.
3. Rinse in distilled water and stain in Working Giemsa Solution* (#26773-1A) overnight.
 - a. Working Giemsa Solution may be made from the stock solution by mixing:
Giemsa Stock (#26773-01) - 1.25 ml
Methanol - 1.50 ml
Distilled water - 50.0 ml
NOTE: Giemsa stain colors more effectively in tissue at an acid pH. If this has not occurred in the preparation or decalcifications steps, wash in an acid alcohol, and begin stain.
4. Differentiate in Rosin Alcohol Working (#26773-2A) until the sections are purplish-pink color. Check under microscope.
5. Dehydrate in two changes of absolute alcohol and clear in two changes of Xylene (#23400)
6. Mount with Permount (#17986-01).

Stain Results:

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|---------------------------------|--------------|
| Nuclei, Bacteria | Blue |
| Rickettsia | Purple |
| Collagen, other Tissue Elements | Pink to Rose |

References:

Wolbach, S.B., Todd, J.L., and Paltrey, F.W., The Etiology of Pathology Typhus. Harvard University, University Press, Cambridge, MA, p. 13-14, c. 1922..

Luna, L.G., (ed). Manual of Histologic Staining Methods of the AFIP 3rd edition. McGraw-Hill, NY, p. 119, c. 1968.