

Instructions For Use TCS0019-IFU

Rev. Date: Oct. 18, 2012

Revision: 1

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P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 - Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

Reticulum Stain - Tissue Control Slides

Description: Human.

Natural disease state (where applicable).

Paraffin embedded.

Availability: TCS0019-5 5 unstained slides.

TCS0019-25 25 unstained slides.

Storage: 2-25° C.

Suggested Stain Kit: GRS-1

Procedure: See below.

Reticulum Stain Kit (Modified Gomori's)

Description: The Reticulum Stain Kit (Modified Gomori's) is intended for use in histological demonstration of reticular

fibers. The main function of reticular fibers is to provide support. They are normally found throughout the body, particularly in liver, lymph node, spleen and kidney. Ammoniacal silver stains are the most

commonly used methods for demonstration of reticular fibers.

Reticulum: Black Nuclei: Red

Uses/Limitations: Not to be taken internally.

For In-Vitro Diagnostic use only.

Histological applications.

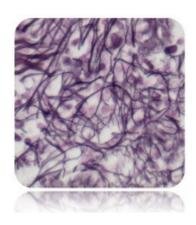
Do not use if reagents become cloudy. Do not use past expiration date. Use caution when handling reagents.

Non-Sterile.

Control Tissue: Liver

Kidney Lymph Node Spleen

Ordering information regarding individual components on back page!











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Kit Contents:

Item #	Kit Contents	<u>Volume</u>	<u>Storage</u>
PPD250	Potassium Permanganate Solution	250 ml	18-25° C.
SAQ015	Sulfuric Acid Solution (1N)	15 ml	18-25° C.
PMS125	Potassium Metabisulfite Solution (3%)	125 ml	18-25° C.
FAS125	Ferric Ammonium Sulfate Solution	125 ml	18-25° C.
SNX065	Silver Nitrate Solution (10%)	65 ml	2-8°C.
PHC015	Potassium Hydroxide Solution (10%)	15 ml	18-25° C.
FRL125	Formalin Solution (20%)	125 ml	18-25° C.
GCB125	Gold Chloride Solution (0.2%)	125 ml	2-8°C.
STB125	Sodium Thiosulfate Solution (5%)	125 ml	18-25° C.
NFS125	Nuclear Fast Red Solution	125 ml	18-25° C.

Required but not included:

Ammonium Hydroxide Solution, Concentrated

Graded Alcohols

Xylene

Precautions: Keep away from open flame.

Avoid contact with skin and eyes.

Harmful if swallowed.

Follow all Federal, State, and local regulations regarding disposal.

Use in chemical fume hood whenever possible.

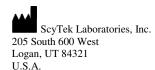
Wear protective clothing.

Preparation of Reagents Prior to Beginning:

- 1. Prepare working Potassium Permanganate Solution by mixing 2.5ml of Sulfuric Acid Solution (SAQ015) with 47.5ml of Potassium Permanganate Solution (PPD250). Mixed solution is stable for 2 days.
- 2. Prepare working Ammoniacal Silver Solution using chemically cleaned glassware in a chemical fume hood as follows:
 Mix 2.5ml of Potassium Hydroxide Solution (PHC015) with 10ml of Silver Nitrate (10%) Solution (SNX065). Add
 concentrated ammonium hydroxide; drop by drop, while swirling the flask continuously, until precipitate just dissolves. A
 few potassium hydroxide crystals will remain. Carefully add Silver Nitrate Solution (10%), drop by drop, until one drop
 causes the solution to become cloudy. Measure the resulting volume, dilute with an equal volume of distilled water. Filter
 into chemically cleaned coplin jar (use enclosed filters and syringe).

Note: Use extreme care in preparation and use of Ammoniacal Silver Solution. Store Ammoniacal Silver Solution in a refrigerator to avoid the formation of explosive compounds. If Ammoniacal Silver Solution is exposed to sunlight, it will explode. Dispose of waste observing all local, state and federal laws.









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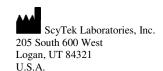
Procedure (Standard):

- 1. Deparaffinize sections if necessary and hydrate to distilled water.
- 2. Place slide in working Acidified Potassium Permanganate Solution for 1 minute.
- 3. Rinse in 3 changes of distilled water.
- 4. Differentiate in Potassium Metabisulfite Solution for 1 minute.
- 5. Rinse in running tap water for 3 minutes.
- 6. Rinse in distilled water.
- 7. Apply Ferric Ammonium Sulfate Solution for 30 seconds.
- 8. Immediately rinse slides in running tap water for 2 minutes.
- 11. Rinse in 2 quick changes of distilled water.
- 12. Apply working Ammoniacal Silver Solution for 1 minute.
- 13. Rinse quickly in 3 changes of distilled water.
- 14. Place slide in 20% formalin for 3 minutes.
- 15. Rinse in running tap water for 3 minutes.
- 16. Rinse in 2 changes of distilled water.
- 17. Apply Gold Chloride Solution for 2-5 minutes.
- 18. Rinse in 2 changes of distilled water.
- 19. Apply Sodium Thiosulfate Solution for 1-2 minutes to remove unreduced silver.
- 20. Rinse in tap water for 2 minutes.
- 21. Counterstain using Nuclear Fast Red Solution for 5 minutes.
- 22. Rinse in tap water.
- 23. Rinse in distilled water.
- 24. Dehydrate through graded alcohols.
- 25. Clear, and mount in synthetic resin.

References:

- 1. Carson, FL., Histotechnology: A Self Instructional Text, ASCP Press, Chicago, IL. Pages 150-155, 1990.
- 2. Sheenan, D.C., Hrapchak, B.B. Theory and Practice of Histotechnology, 2nd Edition. CV Mosby, St. Louis, MO. Pages 181-182, 1980.
- 3. Churukian, CJ., Prolonging the Shelf-life of Solutions Containing Silver Nitrate. Histologic, Volume 10, Page 147, 1980.
- 4. Churukian, CJ., Modified Gomori's method for staining reticulum and collagen. Histologic, Volume 2, Page 23, 1972.
- Wellington, EF., The Explosive properties of ammoniacal-silver solutions. Journal of Medical Lab Technology, Volume 22, Pages 220-223, 1965.
- 6. Gomori, G., A Modification of the Silver Impregnation Method of Staining Reticular Fibers. American Journal of Clinical Pathology, Volume 21, Pages 897-899, 1951.
- Gomori, G., Silver Impregnation Reticulum in Paraffin Sections. American Journal of Clinical Pathology, Volume 13, Pages 993-1002, 1937.









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Bulk Reagent Ordering Information and Current Pricing at www.scytek.com

Description:	Catalog #	Volume
Potassium Permanganate Solution (0.5%)	PPD500 PPD999	500 ml 1000 ml
Sulfuric Acid Solution (1N)	SAQ125 SAQ500 SAQ999	125 ml 500 ml 1000 ml
Potassium Metabisulfite Solution (3%)	PMS125 PMS500 PMS999	125 ml 500 ml 1000 ml
Ferric Ammonium Sulfate Solution	FAS125 FAS500 FAS999	125 ml 500 ml 1000 ml
Silver Nitrate Solution (10%)	SNX125 SNX500	125 ml 500 ml
Potassium Hydroxide Solution (10%)	PHC500 PHC999	500 ml 1000 ml
Formalin Solution (20%)	FRL125 FRL500 FRL999	125 ml 500 ml 1000 ml
Gold Chloride Solution (0.2%)	GCB125 GCB500 GCB999	125 ml 500 ml 1000 ml
Sodium Thiosulfate Solution (5%)	STB125 STB500 STB999	125 ml 500 ml 1000 ml
Nuclear Fast Red Solution	NFS125 NFS500 NFS999	125 ml 500 ml 1000 ml





