

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: For In-Vitro Diagnostic use only.
Histological applications.
Do not use past expiration date.
Use caution when handling these reagents.

Control Tissue: Liver
Kidney
Lymph Node
Spleen


Availability/Contents:

<u>Kit Contents</u>	<u>Volume</u>	<u>Storage</u>
Potassium Permanganate Solution	250 ml	18-25° C.
Sulfuric Acid Solution (1N)	15 ml	18-25° C.
Potassium Metabisulfite Solution (3%)	125 ml	18-25° C.
Ferric Ammonium Sulfate Solution	125 ml	18-25° C.
Silver Nitrate Solution (10%)	65 ml	2-8° C.
Potassium Hydroxide Solution (10%)	15 ml	18-25° C.
Formalin Solution (20%)	125 ml	18-25° C.
Gold Chloride Solution (0.2%)	125 ml	2-8° C.
Sodium Thiosulfate Solution (5%)	125 ml	18-25° C.
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.

Storage: 2° C  25° C

Mixed Storage Conditions.
Separate Contents.


Preparation of Reagents Prior to Beginning:

1. Prepare working Potassium Permanganate Solution by mixing 2.5ml of Sulfuric Acid Solution with 47.5ml of Potassium Permanganate Solution. 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 with 10ml of Silver Nitrate (10%) Solution. 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.**

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.

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.


Storage: 2° C  25° C

**Mixed Storage Conditions.
Separate Contents.**

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References:

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Storage: 2° C  25° C

**Mixed Storage Conditions.
Separate Contents.**