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ab236473
Reticulum Stain Kit (Modified Gomori's)

For the Histological Visualization of Reticular Fibers.

This product is for research use only and is not intended for diagnostic use.

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1. Overview

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

Staining Interpretation:

Reticulum	Black
Nuclei	Red

Control Tissue:

Liver, Kidney, Lymph Node, Spleen.

2. Materials Supplied and Storage

Store kit at room temperature immediately on receipt and check below for storage for individual components. Kit can be stored for 1 year from receipt, if components have not been reconstituted.

Keep away from open flame and refer to the safety datasheet.

Item	Quantity	Storage temperature (before prep)
Potassium Permanganate Solution	250 mL	RT
Sulfuric Acid Solution (1N)	15 mL	RT
Potassium Metabisulfite Solution (3%)	125 mL	RT
Ferric Ammonium Sulfate Solution	125 mL	RT
Silver Nitrate Solution (10%)	65 mL	4°C
Potassium Hydroxide Solution (10%)	15 mL	RT
Formalin Solution (20%)	125 mL	RT
Gold Chloride Solution (0.2%)	125 mL	4°C
Sodium Thiosulfate Solution (5%)	125 mL	RT
Nuclear Fast Red Solution	125 mL	RT

3. Materials Required, Not Supplied

These materials are not included in the kit, but will be required to successfully perform this assay:

- 28% Concentrated Ammonium Hydroxide Solution
- Xylene or xylene substitute
- Graded Alcohols
- Distilled water

4. General guidelines, precautions, and troubleshooting

Please observe safe laboratory practice and consult the safety datasheet.

For general guidelines, precautions, limitations on the use of our assay kits and general assay troubleshooting tips, particularly for first time users, please consult our guide:
www.abcam.com/assaykitguidelines

For typical data produced using the assay, please see the assay kit datasheet on our website.

5. Reagent preparation

Prepare working Potassium Permanganate Solution.

Mix 2.5 mL of Sulphuric Acid Solution with 47.5 mL of Potassium Permanganate Solution. Mixed Solution is stable for 2 days.

Prepare Ammoniacal Silver Solution immediately prior to use.

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.**

ΔNote: 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.

6. Staining Protocol

– Equilibrate all materials and prepared reagents to room temperature just prior to use and gently agitate.

6.1 Deparaffinize sections if necessary and hydrate in distilled water.
6.2 Place slide in working Acidified Potassium Permanganate Solution for 1 minute.
6.3 Rinse in 3 changes of distilled water.
6.4 Differentiate in Potassium Metabisulfite Solution for 1 minute.
6.5 Rinse in running tap water for 3 minutes.
6.6 Rinse slide in distilled water.
6.7 Apply Ferric Ammonium Sulfate Solution for 30 seconds.
6.8 Immediately rinse slides in running tap water for 2 minutes.
6.9 Rinse in 2 quick changes of distilled water.
6.10 Apply working Ammoniacal Silver Solution for 1 minute.
6.11 Rinse quickly in 3 changes of distilled water.
6.12 Place slide in 20% formalin for 3 minutes.
6.13 Rinse in running tap water for 3 minutes.
6.14 Rinse in 2 changes of distilled water.
6.15 Apply Gold Chloride Solution for 2-5 minutes.
6.16 Rinse in 2 changes of distilled water.
6.17 Apply Sodium Thiosulfate Solution for 1-2 minutes to remove unreduced silver.
6.18 Rinse in tap water for 2 minutes.
6.19 Counterstain using Nuclear Fast Red Solution for 5 minutes.
6.20 Rinse in tap water.
6.21 Rinse in distilled water.
6.22 Dehydrate through graded alcohols.
6.23 Clear, and mount in synthetic resin.

7. FAQs / Troubleshooting

General troubleshooting points are found at
www.abcam.com/assaykitguidelines.

8. Notes

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