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ab236474 Reticulum Stain Kit

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 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 (1%)	125 mL	RT
Ferric ammonium Sulfate (3%)	125 mL	RT
Potassium Metabisulfite Solution (3%)	125 mL	RT
Formalin Solution (20%)	125 mL	RT
Gold Chloride Solution (0.1%)	125 mL	4°C
Sodium Thiosulfate Solution (5%)	125 mL	RT
Light Green Solution (3%)	125 mL	RT
Sodium Hydroxide Solution (3%)	125 mL	RT
Silver Nitrate Solution (10%)	10 mL x 5 vials	4°C

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. Preparation of Ammonium Silver Solution

Prepare Ammoniacal Silver Solution immediately prior to use.

To 17ml of Distilled Water add one (10 ml) vial of Silver Nitrate Solution (10%) and mix completely. Add 1 ml of 28% Ammonium Hydroxide (Not Included in Kit) while continuously mixing. The mixture will initially turn brown and then become clear. Add 10 ml of Sodium Hydroxide Solution (3%) and mix completely. If the solution does not remain colorless, add 28% Ammonium Hydroxide drop by drop until no precipitate remains. Add Distilled Water to a total volume of 60 ml and mix completely. Solution is now ready for use.

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 Potassium Permanganate Solution for 5-10 minutes.
- 6.3** Rinse in 3 changes of distilled water.
- 6.4** Differentiate in Potassium Metabisulfite Solution until section is transparent.
- 6.5** Rinse in 3 changes of distilled water.
- 6.6** Apply Ferric Ammonium Sulfate Solution for 10 minutes.
- 6.7** Rinse in 2 quick changes of distilled water.
- 6.8** Apply working Ammoniacal Silver Sulfate Solution for 2-3 minutes.
- 6.9** Rinse in 3 changes of distilled water.
- 6.10** Place slide in formalin solution for 1 minute.
- 6.11** Rinse in 3 changes of distilled water.
- 6.12** Apply Gold Chloride Solution for 3-5 minutes.
- 6.13** Rinse in 2 changes of distilled water.
- 6.14** Apply Sodium Thiosulphate Solution for 1-2 minutes to remove unreduced silver.
- 6.15** Rinse in tap water for 2 minutes.
- 6.16** Counterstain using Light Green Solution for 2-5 minutes.
- 6.17** Rinse in tap water followed by distilled water.
- 6.18** Dehydrate through 3 changes of Absolute Alcohol.
- 6.19** Clear and mount in synthetic resin.

7. FAQs / Troubleshooting

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

8. Notes

Technical Support

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