

ab150684

Reticulum Stain Kit (Connective Tissue Stain)

Instructions for Use

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. Introduction

The Reticulum Stain Kit (Connective Tissue Stain) 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. Kit Contents

Components	Amount	Storage
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
Nuclear Fast Red Solution	125 ml	RT
Sodium Hydroxide Solution (3%)	125 ml	RT
Silver Nitrate Solution (10%)	5 x 10 ml	4°C

3. Storage and Handling

For storage temperatures please see the Table

Keep away from open flame. Refer to the Safety Data Sheet.

4. Additional Materials Required

28% Concentrated Ammonium Hydroxide Solution

Graded Alcohols

Xylene or Xylene Substitutue

Distilled water

5. Preparation of Ammoniacal 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. Add 10 ml of Sodium Hydroxide Solution (3%) and mix completely. The mixture will initially turn brown and then start to become clear. If the solution does not remain colorless, add 28% Ammonium Hydroxide drop by drop until no precipitate remains and the solution is completely clear. Add Distilled Water to a total volume of 60 ml and mix completely. Solution is now ready for use.

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.*

6. Staining Protocol

1. Deparaffinize sections if necessary and hydrate in distilled water.
2. Place slide in Potassium Permanganate Solution for 5-10 minutes.
3. Rinse in 3 changes of distilled water.
4. Differentiate in Potassium Metabisulfite Solution until section is transparent.
5. Rinse in 3 changes of distilled water.
6. Apply Ferric Ammonium Sulfate Solution for 10 minutes
7. Rinse in 2 quick changes of distilled water.
8. Apply working Ammoniacal Silver Solution for 2-3 minutes.
9. Rinse in 3 changes of distilled water.
10. Place slide in Formalin Solution for 1 minute.
11. Rinse in 3 changes of distilled water.
12. Apply Gold Chloride Solution for 3-5 minutes.
13. Rinse in 2 changes of distilled water.
14. Apply Sodium Thiosulfate Solution for 1-2 minutes to remove unreduced silver.
15. Rinse in tap water for 2 minutes
16. Counterstain using Nuclear Fast Red Solution for 2-5 minutes
17. Rinse in tap water followed by distilled water.
18. Dehydrate through 3 changes of Absolute Alcohol.

19. Clear and mount in synthetic resin.

7. Reference Image

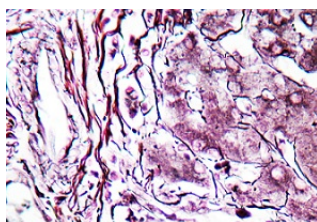


Figure 1 Staining in Liver using ab150684 - Reticulum Stain Kit

For further technical questions please do not hesitate to contact us by email (technical@abcam.com) or phone (select “contact us” on www.abcam.com for the phone number for your region).

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