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ab150666 Copper Stain (For Microwave)

For the Differentiation of Cells in Vaginal Smears for the Detection of Vaginal, Uterine and Cervical Cancer.

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

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1. Overview

Copper Stain (For Microwave) (ab150666) is intended for the demonstration of copper deposits in tissue sections.

Staining Interpretation:

Copper Deposits	Light Brown to Red
Nuclei	Blue

Control Tissue: Fetal Liver or a known positive.

2. Materials Supplied and Storage

For storage temperatures please check below for storage for individual components. Kit can be stored for 1 year from receipt.

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

Item	Quantity	Storage temperature (before prep)
Rhodamine Stock Solution	30 mL	4°C
Acetate Buffer Solution (pH 8.0)	2 x 500 mL	RT
Hematoxylin (Modified Mayer's 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:

- Staining Jar
- Absolute Alcohol.
- Xylene or Xylene Substitute.

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. Staining Protocol

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

5.1 Prepare Working Rhodamine Solution:

1. Combine the following:

Component	Volume (mL)
Rhodamine Stock Solution	5
Acetate Buffer Solution (pH 8.0)	45

Δ Note: Shake Rhodamine Stock Solution immediately before adding to Acetate Buffer.

Δ Note: Rhodanine beings to precipitate immediately once mixed with the Acetate Buffer Solution. This precipitation can reduce the overall staining level. It's important to mix the solutions just before staining and use immediately. Pale yellow mixtures with high precipitation or flocculation may not perform satisfactorily.

Δ Note: If copper staining is light or absent, increase the concentration of Rhodanine Stock solution to Acetate buffer and re-run staining.

Δ Note: Other methods of heating the "Working Rhodanine Solution" may be used but must be validated by the user.

Δ Note: Allow Rhodanine stock solution to come to room temperature and shake well before use.

5.2 Procedure:

1. Deparaffinize sections if necessary and hydrate in distilled water. Prepare Working Rhodanine Solution as detailed in section 5.1
2. Place slide in warmed Working Rhodamine Solution and microwave at full power until solution is hot. Do not allow solution to boil.
3. Cap container, gently agitate to mix evenly, and allow solution to cool on countertop to room temperature with occasional agitation.

4. Examine slide microscopically and repeat heating/cooling cycle (steps 3 and 4) until desired staining intensity is achieved.
5. Rinse slide in two changes of Acetate Buffer Solution for 1 minute each.
6. Rinse briefly with deionized water.
7. Stain tissue section with Hematoxylin (Modified Mayer's solution)for 5-10 seconds. Increase incubation time for stronger nuclear staining.
8. Rinse briefly with deionized water.
9. Rinse slide in Acetate Buffer Solution (pH 8.0) for 1 minute.
10. Dehydrate slide in 3 changes of absolute alcohol.
11. Clear in two changes of xylene or xylene substitute and mount in synthetic resin.

6. FAQs / Troubleshooting

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

7. Notes

Technical Support

For all technical or commercial enquiries please go to:

www.abcam.com/contactus

www.abcam.cn/contactus (China)

www.abcam.co.jp/contactus (Japan)