

## Copper Stain Kit (For Microwave)

**Description** The Copper Stain Kit (For Microwave) is intended for the demonstration of copper deposits in tissue sections.

**Copper Deposits** Light Brown to Red  
**Nuclei** Blue

**Uses/Limitations** Not to be taken internally.  
For in vitro diagnostic use only.  
Histological applications.  
Do not use past expiration date.  
Use caution when handling reagents.  
Non-Sterile

**Positive Control** Fetal liver or a known positive.

<b>Kit Contents</b>	<b>Catalog</b>	<b>Product</b>	<b>Volume</b>	<b>Storage</b>
	HRSS030	Rhodanine Solution (Stock)	8 ml	2-8°C
	HSAB500	Acetate Buffer Solution, pH 8.0	3 x 60 ml	18-25°C
	HHMM125	Hematoxylin, Mayer's (Lillie's Mod.)	30 ml	18-25°C
		Mixing / Dropper Vial	1 ea	

**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

**Procedure**

1. Prepare Working Rhodanine Solution in Dropper Vial. Combine:
  - a. 1 drop Rhodanine Solution (Stock).
  - b. Shake Stock Solution immediately before adding to 11 drops Acetate Buffer Solution, pH 8.0
2. Deparaffinize sections if necessary and hydrate to distilled water.
3. Place a 125ml beaker containing 100ml of water in microwave and heat to nearly boiling.
4. After heating water, carefully lay slide across the top of the beaker containing the hot water and apply 5 drops of Working Rhodanine solution. Rising heat and steam from water will warm slide and enhance staining.
5. Allow Working Rhodanine solution to incubate on tissue section until water has cooled to room temperature. Check occasionally to ensure that the tissue section is not allowed to dry.
6. Examine slide microscopically and repeat heating/cooling cycle until desired

staining intensity is achieved.

7. Rinse slide in 5-6 drops of Acetate Buffer Solution, pH 8.0 for 1 minute, shake off excess and repeat.
8. Stain tissue section with 5-6 drops of Hematoxylin, Mayer's (Lillie's Modification) for 5-10 seconds.
9. Rinse slide in 5-6 drops of Acetate Buffer Solution, pH 8.0 for 1 minute, shake off excess and repeat twice more.
10. Dehydrate slide in 3 changes of absolute alcohol.
11. Clear in 2 changes of xylene or xylene substitute, and mount in synthetic resin.

**References**

1. Sheehan, DC., Hrapchak, BB. Theory and Practice of Histotechnology; 1980, page 230.
2. Lindquist, RR. Studies on the Pathogenesis of Hepatolenticular II: Cytochemical methods for the location of copper. Arch Pathol; 1969, Volume 87: page 370.