

Instructions For Use

205 South 600 West Logan, Utah 84323, U.S.A. – Tel. (800) 729-8350 – Tel. (435) 755-9848 – Fax (435) 755-0015 – www.scytek.com Rev. 4, 5/23/2024

Orcein Solution

Description and Principle

Orcein Solution may be used in histology procedures for the visualization of Hepatitis B surface Antigen (HBsAg), elastic fibers, and copper associated proteins. HBsAg appears as irregular shaped aggregates in the cytoplasmic region of the cells. This reagent may be used on formalin-fixed, paraffin-embedded or frozen sections.

Expected Results

HBsAg:	Dark Brown/Purple
Elastic Fibers:	Dark Brown/Purple
Copper Assoc. Proteins:	Dark Purple
Background:	Light Reddish/Purple

Kit Contents	<u>Storage</u>
Additional Kit Reagents Sold Separately	
1. Potassium Permanganate Sol. (5%)	18-25°C
2. Sulfuric Acid Solution (3%)	18-25°C
Oxalic Acid Solution (2%)	18-25°C
4. Orcein Solution	18-25°C
5. Differentiating Solution	18-25°C

Suggested Controls (not provided)

Known hepatitis positive liver, Lung for elastic fiber, Any well fixed tissue cut 3-5 microns.

Uses/Limitations

For In-Vitro Diagnostic use only. Do not use if reagents become cloudy or precipitate Do not use past expiration date. Use caution when handling reagents. Non-Sterile Intended for FFPE sections cut at 5-10µm. This procedure has not been optimized for frozen sections. Frozen sections may require protocol modification.

Storage

Store at room temperature (18-25°C).

Safety and Precautions

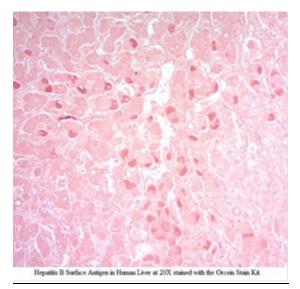
Please see current Safety Data Sheets (SDS) for this product and components GHS classification, pictograms, and full hazard/precautionary statements.

Procedure

Prepare Oxidizing Immediately Prior to Beginning Procedure:

- Combine: 50 ml Distilled Water
 - 5 ml Potassium Permanganate Solution (5%) 3 ml Sulfuric Acid Solution (3%)
 - Mix thoroughly.
- 1. Deparaffinize sections if necessary and hydrate to distilled water.
- 2. Incubate slide in freshly prepared Oxidizing Solution for 10 minutes.
- 3. Rinse slide briefly in running tap water followed by 1 dip in distilled water.

4. Incubate slide in Oxalic Acid Solution (2%) for 10 minutes or until clear. Note: Section should be colorless following this step.



5. Rinse slide for 1 minute in running tap water followed by 2 dips in distilled water.

6. Incubate slide in coplin jar containing Orcein solution for 4-8 hours (2 hours is sufficient for elastin). Note: Ensure tissue is fully immersed in staining jar. Close lid to prevent evaporation.

7. Rinse slide in Alcohol, Reagent (70%).

8. Differentiate in Differentiating Solution for 10-60 seconds.

9. Dip slide in Alcohol, Reagent (70%) and check slide microscopically for proper differentiation.

Note: Repeat step 8 if necessary.

- 10. Dehydrate quickly in 3 changes of absolute alcohol.
- 11. Clear, and mount in synthetic resin.

Note: If darker staining is preferred:

1) Incubation time in Orcein solution may be increased.

2) Differentiation may be omitted by replacing steps 7-9 with a simple rinse with deionized water.

References

 Deodhar K.P., Tapp E., Scheuer P.J. Orcein staining of Hepatitis B Antigen in paraffin sections of Liver Biopsies. Journal of Clinical Pathology; vol. 28: pages 66-70, 1975.

 Salaspuro, M., Sipponen, P. Demonstration of an intracellular copper-binding protein by Orcein staining in long-standing cholestatic liver diseases. Gut, 1976, volume 17: pages 787-790. ScyTek Laboratories, Inc. 205 South 600 West Logan, UT 84321 435-755-9848 U.S.A.



Ecrep Emergo Europe Prinsessegracht 20 2514 AP The Hague, The Netherlands