

Version 3b Last updated 19 December 2025

ab245883 Jones Stain Kit (Basement Membrane)

For use in histological staining of the basement membrane and reticular fibers.

View Jones Stain Kit (Basement Membrane) datasheet:

www.abcam.com/ab245883

[use www.abcam.cn/ab245883 for China, or www.abcam.co.jp/ab245883 for Japan]

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

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1. Overview

Jones Stain Kit (Basement Membrane) ab245883 is intended for use in histological demonstration of the basement membrane and reticular fibers. This procedure is ideal for staining renal glomerular basement membranes. The main function of the basement membrane and reticular fibers is to provide anchorage and support. They are normally found throughout the body, particularly in the kidney, spleen, and lung.

Staining Interpretation:

Basement Membrane:	Black
Reticulum Fibres:	Black
Nuclei:	Red
Cytoplasm:	Light pink

Control Tissue:

Kidney cut at 2 microns. Lung. Spleen.

2. Materials Supplied and Storage

Check below for storage of 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 of Parts A and B	Storage temperature (before prep)	Storage temperature (after prep)
Periodic Acid Solution	250 mL	4°C	4°C
Methenamine Solution	2 x 250 mL	4°C	4°C
Silver Nitrate Solution (5%)	30 mL	4°C	4°C
Borax Solution	125 mL	RT	RT
Gold Chloride Solution (0.2%)	125 mL	4°C	4°C
Sodium Thiosulfate Solution (5%)	125 mL	RT	RT
Nuclear Fast Red Solution (Enhanced)	125 mL	RT	RT

3. 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.

4. Assay Procedure

- Equilibrate all materials and prepared reagents to room temperature just prior to use and gently agitate.
- All glassware used in this procedure should be chemically cleaned and rinsed thoroughly in distilled water.
- Do not use metal forceps to remove slides from reagents. Use plastic forceps only.
- Increasing the number of slides present in working Methenamine Silver Solution will decrease the rate of silver staining. Monitor slides during Methanamine Silver incubation to achieve desired intensity.

1.1 Deparaffinize sections if necessary and hydrate to distilled water.

1.2 Incubate slide in Periodic Acid Solution for 15 mins.

1.3 Rinse in two changes of distilled water.

1.4 Combine the following for a working Silver Methenamine Solution:

Component	Volume
Methenamine Solution	42 mL
Silver Nitrate Solution (5%)	2.5 mL
Borax Solution	6 mL

Δ Note: Mixed solution may not be stored for reuse later.

1.5 Place working Silver Methenamine Solution in 65°C water bath and allow temperature to equilibrate.

1.6 Incubate slide in working Methenamine Silver Solution for 20-60 minutes. Dip slide in “hot” distilled water and check under a microscope for evaluation of silver impregnation. Basement membrane and reticular fibers should be black. If color is not sufficient, return the slide to working Methenamine Silver Solution checking frequently until desired staining intensity is achieved.

1.7 Rinse in four changes of distilled water.

1.8 Tone slide in Gold Chloride Solution (0.2%) for 30 seconds.

1.9 Rinse in four changes of distilled water.

1.10 Incubate slide in Sodium Thiosulfate Solution (5%) for 2 mins.

1.11 Rinse in tap water followed by two changes of distilled water.

1.12 Incubate slide in Nuclear Fast Red Solution for 2 mins.

1.13 Rinse slide quickly in distilled water.

- 1.14** Rinse slide using absolute alcohol.
- 1.15** Dehydrate in three changes of absolute alcohol, clear, and mount in synthetic resin.

5. Notes

Technical Support

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