

Instructions For Use ES4821-IFU

Rev. Date: Nov. 13, 2017

Revision: 4

Page 1 of 3

701 Hemlock Road - Morgantown, PA 19543, U.S.A. - Tel. (610) 524-5810 - Fax (610) 901-3046 - www.azersci.com

Warthin-Starry Stain Kit

Description: The Warthin-Starry Stain Kit is intended for use in the visualization of Spirochetes, Helicobacter pylori,

Legionella pneumophila, and Cat Scratch Fever bacteria. This kit may be used on formalin-fixed,

paraffin-embedded or frozen sections.

Helicobacter pylori:
Legionella pneumophila:
Spirochetes:
Cat Scratch Fever Bacteria:
Klebsiella:
Nuclei:
Brown
Background:
Black
Black
Brown/Black
Brown
Yellow

Uses/Limitations: For In-Vitro Diagnostic use only.

Histological applications.

Do <u>not</u> use past expiration date.

Use caution when handling these reagents.

Control Tissue: Any well fixed tissue.

Availability/Contents:

Kit Contents	<u>Volume</u>	<u>Storage</u>
Spirochete Sensitizer	125 ml	Room Temperature
Gelatin (4%), Acidulated	125 ml	2-8°C
Silver Nitrate Solution (0.5%), Acidulated	125 ml	2-8°C
Hydroquinone Solution (0.1%), Acidulated	2x30 ml	2-8°C
Silver Nitrate Solution (2%), Acidulated	30 ml	2-8°C

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.

Preparation of Reducing Solution Prior to Beginning:

Storage: 2° C

Mixed Storage Conditions. Separate Contents.



Instructions For Use ES4821-IFU

Rev. Date: Nov. 13, 2017

Revision: 4

Page 2 of 3

701 Hemlock Road - Morgantown, PA 19543, U.S.A. - Tel. (610) 524-5810 - Fax (610) 901-3046 - www.azersci.com

1. Warm Gelatin (4%), Acidulated to liquify prior to beginning. Prepare Reducing Solution in an unused plastic Slide Jar.

2. Combine: 12.5 ml Gelatin (4%), Acidulated

20-30 Drops Silver Nitrate Solution (2%), Acidulated 7.5 ml Hydroquinone Solution (0.1%), Acidulated

Procedure (Standard):

- 1. Deparaffinize sections if necessary and hydrate to distilled water.
- For spirochete staining only, place slide in room temperature Spirochete Sensitizer for 5 minutes (Omit this step for other listed bacteria). Note: Use of Spirochete Sensitizer will not affect staining of Helicobacter pylori, Legionella pneumophila, or Cat Scratch Fever bacteria.
- 3. Pour 20ml of Silver Nitrate Solution (0.5%), Acidulated in an unused plastic staining jar and place in a waterbath at 65-70°C for 5 minutes.
- 4. Place slide in warmed Silver Nitrate Solution (0.5%), Acidulated and incubate for 3-5 minutes with repeated agitation.
- 5. Transfer slide into previously prepared Reducing Solution and agitate. Place staining jar in a waterbath at 65-70°C with frequent agitation until tissue section is brown (approximately 1-5 minutes).
- 6. Rinse slide carefully in hot tap water for 2 minutes.
- 7. Dehydrate slide through 3 changes of fresh Absolute Alcohol.
- 8. Clear and mount in synthetic resin.

Rapid Procedure (Microwave Oven):

- 1. Deparaffinize sections if necessary and hydrate to distilled water.
- 2. For spirochete staining only, place slide in room temperature Spirochete Sensitizer for 5 minutes (Omit this step for other listed bacteria). Note: Use of Spirochete Sensitizer will not affect staining of Helicobacter pylori, Legionella pneumophila, or Cat Scratch Fever bacteria.
- 3. Pour 20ml of Silver Nitrate Solution (0.5%), Acidulated in an unused plastic staining jar and microwave at full power for 30 seconds. Invert several times to equalize temperature.
- 4. Place slide in warmed Silver Nitrate Solution (0.5%), Acidulated and incubate for 5 minutes with repeated agitation.
- Warm previously prepared Reducing Solution in microwave at full power for 20 seconds. Invert several times to equalize temperature.
- 6. Transfer slide into warmed Reducing Solution and with frequent agitation until tissue section is brown (approximately 2-5 minutes).
- 7. Rinse slide carefully in hot tap water for 2 minutes.
- 8. Dehydrate slide through 3 changes of fresh Absolute Alcohol.

Storage: 2° C 25° C

Mixed Storage Conditions. Separate Contents.



Instructions For Use ES4821-IFU

Rev. Date: Nov. 13, 2017

Revision: 4

Page 3 of 3

701 Hemlock Road - Morgantown, PA 19543, U.S.A. - Tel. (610) 524-5810 - Fax (610) 901-3046 - www.azersci.com

9. Clear and mount in synthetic resin.

References:

1. Kerr, D.A. Improved Warthin-Starry method for tissue sections; American Journal of Clinical Pathology, 1938, Vol. 8: pages 63-67.