



Warthin-Starry Staining Kit

(Cat# K1437-125; Store at Multiple Temperatures)

I. Introduction:

The Warthin-Starry Staining Kit is intended for use in the visualization of Spirochetes, *Helicobacter pylori*, *Legionella pneumophila*, and Cat Scratch Fever bacteria.

Helicobacter pylori: Black

Legionella pneumophila: Black

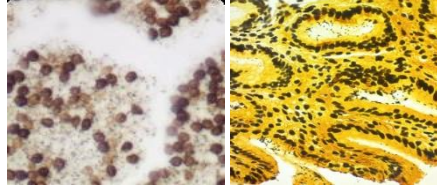
Spirochetes: Black

Cat Scratch Fever Bacteria: Black

Klebsiella: Brown/Black

Nuclei: Brown

Background: Yellow



Warthin-Starry Staining

II. Application:

- Histological applications
- For *in vitro* diagnostic use

III. Sample Type:

- Formalin-fixed, paraffin-embedded or frozen sections.
- Control Tissue: Any spirochete infected tissue or *H. Pylori* infected tissue.

IV. Kit Contents:

Components	K1437-125	Part Number	Storage Temperature
SpiroPrep	125 ml	K1437-XX-1	RT
Gelatin (4%), Acidulated	2 x 65 ml	K1437-XX-2	2-8°C
Silver Nitrate Solution (0.5%), Acidulated	125 ml	K1437-XX-3	2-8°C
Hydroquinone Solution (0.1%), Acidulated	2 x 30 ml	K1437-XX-4	2-8°C
Silver Nitrate Solution (2%), Acidulated	30 ml	K1437-XX-5	2-8°C

V. User Supplied Reagents and Equipment:

- Distilled water
- Staining jar
- Water bath
- Forceps
- Absolute alcohol
- Synthetic resin

VI. Shipment and Storage:

All the reagents are shipped at room temperature and stored at multiple temperatures.

VII. Reagent Preparation:

- Do not use if reagents become cloudy.
- Do not use past expiration date.
- Use caution when handling reagents.
- Preparation of Reducing Solution Prior to Beginning:
 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

VIII. Procedure (Standard):

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. For spirochete staining only, place slide in room temperature SpiroPrep for 5 min (Omit this step for other listed bacteria). *Note: Use of SpiroPrep will not affect staining of Helicobacter pylori, Legionella pneumophila, or Cat Scratch Fever bacteria.*
3. Pour 20 ml of Silver Nitrate Solution (0.5%), Acidulated in an unused plastic staining jar and place in a waterbath at 65-70°C for 5 min.
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 min).
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 SpiroPrep 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 min with repeated agitation.
5. Warm previously prepared Reducing Solution in microwave at full power for 20 sec. 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 min).
7. Rinse slide carefully in hot tap water for 2 min.
8. Dehydrate slide through 3 changes of fresh Absolute Alcohol.
9. Clear and mount in synthetic resin.

FOR RESEARCH USE ONLY! Not to be used on humans.