MasterTech S² Stain Kit Instructions for Use



Modified Warthin-Starry

Kit Item # QS2-KTWST

The Modified Warthin-Starry Stain Kit is used to identify Helicobacter pylori, spirochetes, Legionella pneumophila, and Cat Scratch Fever bacteria.

INCLUDES COMPONENTS	Item#	Vials Included	
Dewax Solution	S001-15	1 vial (15mL)	
Spirochete Sensitizer Solution	KC225-15	1 vial (15mL)	
Silver Nitrate Acidulated, 0.5%	KC222-15	1 vial (15mL)	
Gelatin Acidulated, 4%	KC224-15	3 vials* (15mL)	
Acidulated Silver Nitrate, 2%	KC221-15	1 vial (15mL)	
Acidulated Hydroquinone Solution, 0.1%	KC223-15	2 vials* (15mL)	
15ml Clear Vial with Cap	PC750-100	1 vial (15mL)	

^{*}Not all vials of this solution are required to be loaded on the QS2 instrument for each run. Each reagent component noted as * contains solution for a reduced number of tests to ensure the highest level of staining quality and consistency possible. If multiple vials are required for the particular number of slides being stained, the QS2 instrument will notify you prior to beginning the staining sequence.

STORAGE AND STABILITY

Store components at 2-8C. Do not freeze. The reagents must be returned to storage conditions immediately after use. When properly stored, the reagents are stable to the date indicated on the label.

RESULTS

H. Pylori, Legionella pneumophila, spirochetes, Cat Scratch fever bacteria: Dark brown, gray, or black Background Tissue: Yellow to brown Intended for *in-vitro* use by laboratory professionals.

SPECIMEN PREPARATION

Appropriately fixed, paraffin-embedded, 3-5µm tissue section.

CONTROL TISSUE

Tissue positive for H. Pylori, Cat Scratch Fever, Legionnaires or spirochete.

DILUTION AND MIXING

Most solutions in the kit are ready-to-use. The on-rack mixing feature on the Quantum S2 Slide Stainer will mix the working reducing solution (4% Gelatin Acidulated, 2% Silver Nitrate Acidulated, and 0.1% Hydroquinone Acidulated). **The 4% Gelatin Acidulated must be warmed to a liquid state before use.**

LIMITATIONS AND PRECAUTIONS

See SDS for complete warnings, precautions, hazard and precautionary statements, and disposal information. Do not use metal forceps, racks, or tools with the silver solution. Do not use past expiration date.

INSTRUCTIONS FOR USE

- 1 Before processing, warm the 4% Gelatin Acidulated to a liquid state before using on the stainer. Heat in a standard laboratory oven set from 45-60 C for 5-10 minutes. Do not microwave as this may damage the vial.
- 2 Press Prepare Labels to prepare slide labels, and affix labels to slides.
- **3** Place and secure blue staining chambers in respective module lid.
- 4 Insert labeled slides on the modules and press **Scan Slides**.
- 5 Press **Scan Reagents** to display the required reagent names and volumes (number of tests).
- 6 Place Warthin-Starry Stain Kit vials onto the Reagent Rack and remove caps from vials.
- 7 Use the clean empty vial in Position 40 for on-rack mixing. Make sure this vial is removed from the stainer after the stain run and is appropriately cleaned after each use.
- **8** Press **Scan Reagents** to start the staining process.

The pre-programmed stainer protocol for this stain is set up to demonstrate spirochete staining. For all other bacteria staining, delete the Spirochete Sensitizer and Deionized Water rinse steps from the protocol (contact Technical Services for assistance). Use stains and reagents when they are at room temperature. Tissue section should be placed in proper area of the microscope slide for best results. Refer to the tissue placement guide. Check the level of bulk deionized water before stain run to ensure proper volumes are used for optimal staining results. Replace caps on the vials when not using to minimize solution evaporation or other variables. The blue chambers must be cleaned after each use with Quantum Chamber Cleaning Solution for 20-30 minutes followed by a thorough deionized water rinse. Allow to air dry before next use.



Note: The Modified Warthin Starry Kit requires a tube cleaning cycle after each use (QS2-SILVERCLN).

MATERIALS REQUIRED BUT NOT SUPPLIED

- 1 Control tissue (CSH0125P & CSS0125P)
- 2 Blue Staining Chambers (QHD-CH200-10)
- 3 Tube Cleaning Kit (For Silver Stains) (QS2-SILVERCLN)()
- **4** Quantum Chamber Cleaning Solution (QHD-QCS-1)

NOTES

For possible customizations, staining protocol information, or troubleshooting, please contact the Technical Support Department at StatLab by emailing tech@StatLab.com or calling 1-800-442-3573 ext. 106.

STATLAB QUANTUM S2 STAINER

Run more stains with the StatLab Quantum S2 Slide Stainer, a fully-automated slide staining system with the broadest stain portfolio available. This universal system is designed to automate the manual staining methods routinely used in special stains and related applications. Its user-friendly programming and flexible platform allow for easy user interface. The StatLab MasterTech S2 Stain Kits are to be used exclusively on the Quantum S2 Slide Stainer, and no other reagents should be used other than those provided in the kits or specified as they may damage the platform.

REFERENCES

- 1. Sheehan DC Hrapchak BB: Theory and Practice of Histotechnology; 1980, 190.
- 2. A.F.I.P. Laboratory Methods in Histotechnology: 1992, 132 133.
- 3. With modifications by AMTS R&D Department, 1979-2018.