# **MasterTech** S<sup>2</sup> Stain Kit Instructions for Use



## **Colloidal Iron**

Kit Item # QS2-CIR

The Colloidal Iron stain kit is used to identify acid mucopolysaccharides. Working Colloidal Iron Solution is absorbed and reacts with a working Prussian Blue Solution to serve as the primary stain, and Van Gieson's serves as the counterstain.

BOX 1 OF 2		
INCLUDES COMPONENTS	Item#	Vials Included
Dewax Solution	S001-15	1 vial (15mL)
Acetic Acid, 12%	KC034-15	4 vials (15mL)
Deionized Water	SL30-15	2 vials* (15mL)
Glacial Acetic Acid, 100%	100100-15	1 vial (15 mL)
Colloidal Iron Stock	KC031-SF-15	3 vials* (15mL)
BOX 2 OF 2		
INCLUDES COMPONENTS	Item#	Vials Included
Hydrochloric Acid, 10%	AHH04-7	3 vials* (7mL)
Potassium Ferrocyanide, 3%	AHP04-7	3 vials* (7mL)
Van Gieson's Stain	STVGI-SF-15	2 vials (15mL)
Reagent Alcohol, 100% (DA)	D6900-15	1 vial (15mL)
15mL Clear Vial with Cap	PC750-100	1 vial (15mL)

<sup>\*</sup>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 room temperature. When properly stored, the reagents are stable to the date indicated on the label.

### **RESULTS**

Acid mucopolysaccharides: Bright blue Collagen:

Shades of red

Intended for *in-vitro* use by laboratory professionals. Each kit will stain approximately 50 slides.

## **SPECIMEN PREPARATION**

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

#### **CONTROL TISSUE**

Colon, small intestine

## **DILUTION AND MIXING**

Most of the solutions in the kit are ready-to-use. The on-rack mixing feature on the Quantum S2 Slide stainer will mix the working Colloidal Iron solution (Colloidal Iron Stock, Glacial Acetic Acid, and Deionized Water). The on-slide mixing feature on the stainer will mix the working Iron Stain solution (Hydrochloric Acid, 10% and 3% Potassium Ferrocyanide).

## **LIMITATIONS AND PRECAUTIONS**

For use by laboratory professionals. See SDS for complete warnings, precautions, hazard and precautionary statements, and disposal information. Do not use if reagents become Do not use past expiration date.



#### **INSTRUCTIONS FOR USE**

- Press Prepare Labels to prepare slide labels, and affix labels to slides.
- 2 Place and secure blue staining chambers in respective module lids.
- 3 Insert labeled slides on the modules and press **Scan Slides**.
- 4 Press **Scan Reagents** to display the required reagent names and volumes (number of tests).
- 5 Place Colloidal Iron Stain Kit vials onto the Reagent Rack and remove caps from vials.
- 6 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
- **7** Press **Scan Reagents** to start the staining process.

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. 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 and 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.

## MATERIALS REQUIRED BUT NOT SUPPLIED

- 1 Control tissue (CSC1025P, CSS0325P)
- **2** Blue Staining Chambers (QHD-CH200-10)
- 3 Quantum Chamber Cleaning Solution (QHD-QCS-1)
- 4 QS2 Cleaning Kit, Standard Special Stains (Alcohol) (QS2- CLN)

#### **NOTES**

For possible customizations, staining protocol information, or troubleshooting, please contact the Technical Support Department at StatLab by emailing <a href="mailto:tech@StatLab.com">tech@StatLab.com</a> 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. 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.