Hematology Manual Slide Stainer

Principle

To provide step by step instructions for the proper use and maintenance of the hematology stainer. The hematology stainer is used to stain air dried slides with the Wright stain.

Safety

All specimens, reagents and controls should be handled as though capable of transmitting infectious diseases. Wear appropriate personal protective equipment when running patient samples or performing scheduled maintenance. Refer to: Policy and Procedures Safety Manual Infection Control and Procedures 11-085-01.

Reagents

Ames Hematek Slide Stainer
Hematek Stain Pak (Modified Wright's Stain)
Glass microscope slides
Microscope

Procedure

DAILY

Cleaning Platen: Perform daily.

Step	Action
1	Lower the operating lever to "OFF"
2	Carefully flood the working area of the platen with methanol.
3	Using a soft, disposable tissue/gauze, wipe the platen clean.
4	Flood the working area of the platen with tap water.
5	Carefully wipe platen. Wipe only right to left to avoid damaging the sensing switch fingers.

Check Waste: Perform daily

Step	Action
1	The waste tray is located beneath stainer.
2	Check level in waste tray, drain as needed.
3	To empty waste: Open the waste tray and empty all waste to the 5 gallon stain waste collection container used for the Sysmex auto slide maker and stainer.

Procedure, continued

Check Fan: Perform daily

Step	Action
1	The drying fan is located on the left side of the stainer.
2	Verify that the drying fan is functional.

Staining the slide:

Step	Action
1	Clean instrument before each use by wiping the staining platform with methanol.
2	Prime stainer. a. Move the switch, located on the front left, to the prime position and hold until the stain flows freely onto the staining platform. b. Wipe stain off with a dry gauze before placing slide to be stained. c. Visually verify that all solutions are being delivered.
3	For each staining batch, place two blank slides in front of the slides to be stained. Place slides into groves to be automatically stained. • The blank slides are used to ensure uniform priming and staining of the subsequent slides. • The slide label should be away from user with the frosted (labeled) surface to the left.
4	Allow to dry. Once dry, slides are ready for microscopic review.

Evaluation of Stain Quality:

1) Macroscopically, a properly prepared and well-stained slide should appear pink in the thin area and purplish-blue in the thicker area.

2) Microscopically, the slide appears as follows:

Cells / Component	Color
RBC	salmon pink
nuclei of neutrophils	deep blue-purple
specific granules of neutrophils, granules of lymphocytes, granules of platelets	light purple or violet
specific granules of basophils	deep purple
Specific granules of eosinophils	orange
cytoplasm of lymphocytes	blue
cytoplasm of monocytes	blue-gray
cytoplasm of neutrophils	light pink
cytoplasm of platelets	purple-blue to lilac

Procedure, continued

3) Document that the stain quality is good by putting your initials in the daily maintenance log (see attached form below), then proceed with staining patient slides.

4) If the stain is unsatisfactory, follow steps below:

1	Repeat stain.
2	If repeat stain is still not acceptable, then: • Check for presence of bubbles in line • Check that stain/fluid is flowing properly through tubing • Check buffer/fluid levels • Check buffer pH, it should be between 6.8 – 7.0 • Clean or change the tubings • Change the stain pak
3	After troubleshooting and stain quality is still unacceptable, do not use the stainer. Call Instrument Repair (IR) and ask for a loaner so we can send the non-functional stainer for service.

WEEKLY

Flushing Canula & Tubing: Perform weekly

1	Place the stain canula, with tubing attached, into a container of methanol.
2	Lift operating lever to the top position (prime).
3	Hold the lever in the top position until clear solution appears on the plate.
4	Remove the canula from methanol and continue to prime until tubing is completely empty of all solution.
5	Repeat steps 3-6 using tap water instead of methanol.
6	Repeat steps 1-5 to flush the buffer and rinse canulas and tubing.

Procedure, continued

AS NEEDED

Replacing/Changing Stain Pak: Perform as needed

1.	Remove the three canulas with attached tubes from the empty reagent Stain Pak.
2.	Lift out the Stain Pak carton out of the well at the rear of the instrument.
3.	Insert new Stain Pak carton in the well, making sure the stain bottle is to the right rear of the instrument and the pack is resting on the tray at the bottom of the well.
4.	Remove the perforated tabs on the new Stain Pak carton.
5.	Insert each canula in its respective bottle by puncturing the centers of the inverted area on the bottles.
6.	Push canulas down until the guard at the top just touches the plastic container.
7.	Prime reagents until tubes are clear of air bubbles.

Document History Page

Change type: New, Major, Minor etc.	Changes Made to SOP – describe	Name of responsible person/date	Med. Dir. Reviewed/ Date	Lab Manager reviewed/ date	Date change Implemented
Minor	Updated format and revised index number.	Julius Salomon, 7/1/17			