



Instructions for Use

SHURStain™ H&E Staining System

The SHURStain™ family of H&E stains is designed to produce precise, consistent H&E staining. Choice of reagents and staining times will depend on the use and the personal preference of the diagnosing physician. The following are guidelines that will help establish a custom protocol for your specific needs. All the hematoxylin in the SHURStain™ line have an effective staining window of 3 to 5 minutes. Developed as progressive stains, the intensity of nuclear staining will increase as the time increases. Some formulations are more potent than others, allowing the desired intensity to be reached at shorter times. The hematoxylin and eosin stains can have an expected throughput of 2,000-2,500 slides per 500mL bottle. Actual results may vary from lab to lab depending on the staining equipment used, control of carry over into each solution, and length of time stains are left exposed. As a general rule, we recommend changing the hematoxylin and eosin stains once per week if throughput has not been reached. Clarifying and Bluing solutions should be changed more often.

SHURStain™ Hematoxylin

SHURStain™ Hematoxylin is a uniquely formulated, progressive Hematoxylin. When used in accordance with our staining guidelines it will produce crisp, well delineated nuclear chromatin while eliminating background staining. SHURStain™ Hematoxylin produces staining similar to Gill's and Harris Hematoxylin and has no affinity for mucin staining. SHURStain™ Hematoxylin will not form a surface sheen or require daily filtering however, small crystals may form in the bottom of the bottle. SHURStain™ Hematoxylin contains aluminum salt mordant at their saturation point. These crystals will not interfere with the staining process. If you find these crystals troublesome, they can simply be filtered out. SHURStain™ Hematoxylin is an excellent nuclear stain for routine H&E staining, frozen sections, and IHC. It does not contain mercury or alcohol.

SHURStain™ Hematoxylin Plus

SHURStain™ Hematoxylin Plus is a more potent version of our standard SHURStain™ Hematoxylin, producing many of the same staining characteristics with more intensity.

The Plus version contains a different mordant complex which will not produce an abundance of aluminum crystals, but a small amount may appear during the cold winter months.

Once again, if you find these crystals troublesome, they can simply be filtered out. Just like the original, SHURStain™ Hematoxylin Plus is an excellent nuclear stain for routine H&E staining, frozen sections, and IHC. It does not contain mercury or alcohol.

SHURStain™ Hematoxylin GDH1 & GDH2

Hematoxylin GDH1 & GDH2 is a progressive nuclear stain designed to take the place of Gill's 1 or Gill's 2 type hematoxylin. It produces excellent nuclear detail while remaining more stable and consistent than the traditional Gill's formulations. The intensity of nuclear staining is determined by the amount of time tissue sections are exposed to Hematoxylin GDH1. This stain will not form crystals, requires no daily filtering, and does not contain mercury or alcohol.

Hematoxylin GDH2 is a more potent version of GDH1 designed to take the place of Gill's 3 or Harris type hematoxylin. It produces many of the same staining characteristics as GDH1 but with more intensity. This stain will not form crystals, requires no daily filtering, and does not contain mercury or alcohol.

SHURStain™ Aqueous & Alcoholic Clarifier

All SHURStain™ Hematoxylin solutions are progressive and do not require differentiation. However, one of the SHURStain™ Clarifiers should be used. These uniquely formulated solutions increase cell transparency and help to eliminate any background staining caused by adhesives used in the water bath or charged slides. These clarifying solutions selectively remove non-specific staining without affecting nuclear staining. They are most effective with progressive hematoxylin and should not be used as a differentiator in regressive staining protocols. After hematoxylin staining, excess hematoxylin is rinsed from the tissue section and slides are exposed to SHURStain™ Alcoholic Clarifier or SHURStain™ Aqueous Clarifier for 10-40 seconds. If more transparency is desired or if non-specific staining is present, the exposure time can be increased. SHURStain™ Clarifiers are supplied as ready to use formulations.

SHURStain™ Bluing

SHURStain™ Bluing is a buffered bluing reagent with a balanced pH of to assure bluing of hematoxylin stained tissue sections. Suggested bluing time is 1 minute; after bluing, rinse tissue sections in running water for 1 minute. Excess bluing reagent must be completely

removed prior to eosin staining. SHURStain™ Bluing is supplied in a ready to use formulation.

XydeClear xylene substitute may be used in place of Xylene.

Times in Xylene substitutes may need to be extended.

SHURStain™ Eosin

SHURStain™ Eosin is an alcoholic eosin that allows for

For more information: 1.800.733.5252

stains cytoplasm various shades of pink and red. Prior to staining in SHURStain™ Eosin, tissue sections should be rinsed in alcohol. The concentration of the alcohol rinse can range from 70% to 95%. This helps reduce the negative effects on the eosin caused by carry over. When staining routine hematoxylin and eosin sections, excellent results can be obtained with SHURStain™ Eosin with a staining time of 30 to 90 seconds. A staining time of 30 seconds is recommended as an initial staining time, with an increase of 30 second intervals until desired color and density of the cytoplasm is achieved.

SHURStain™ Recommended Staining Procedure

Station	Solution	Time
1	Xylene*	3 minutes
2	Xylene*	3 minutes
3	Xylene*	3 minutes
4	100% Ethanol	1 minute
5	100% Ethanol	1 minute
6	100% Ethanol	1 minute
7	80% Ethanol	1 minute
8	Running H2O Wash	1 minute
9	Hematoxylin	3-5 minutes
10	Running H2O Wash	1 minute
11	Clarifier	20-60 seconds
12	Running H2O Wash	1 minute
13	Bluing	1 minute
14	Running H2O Wash	1 minute
15	70% to 80% Ethanol	30 seconds
16	Eosin	30-90 seconds
17	100% Ethanol	1 min
18	100% Ethanol	1 min
19	100% Ethanol	1 min
20	Xylene*	1 min
21	Xylene*	1 min
22	Xylene*	1 min

More Information

844.643.1129

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*General
productivity and
products,
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Final Step: Mount and Coverslip with SHURMount™
Mounting Media

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