General Data HEALTHCARE

Instructions for Use

SHURStain™ Select H&E Staining System

The SHURStain™ Select family of H&E stains is the premier group of staining reagents designed to produce precise, consistent H&E staining with exceptional slide throughput. 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. SHURStain™ Select Hematoxylin has an effective staining window of 2 to 5 minutes. Developed as progressive stains, the intensity of nuclear staining will increase as the time increases. 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. The Clarity and TruBlu solutions should be changed more often.

SHURStain™ Select Hematoxylin

SHURStain™ Select 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™ Select Hematoxylin produces sharper, more consistent staining which exceeds Gill's and Harris Hematoxylins as well as many other proprietary commercial formulations. It will not form a surface sheen or require daily filtering. SHURStain™ Select Hematoxylin is an excellent nuclear stain for routine H&E staining, frozen sections, and IHC. It does not contain mercury or alcohol.

SHURStain™ Select Clarity

SHURStain™ Select Hematoxylin is a progressive stain and do not require differentiation. However, one of the select clarifier solutions should be used. These uniquely formulated buffers enhance cytoplasmic details, 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.

After hematoxylin staining, excess hematoxylin is rinsed from the tissue section and slides are exposed to one of the Select clarifiers for 30-90 seconds.

TruBlu Bluing Reagent

TruBlu is a buffered bluing reagent with a balanced pH to assure proper bluing of hematoxylin stained tissue sections. The unique buffering system of TruBlue allows the solution to be more resistant to the effects of carry over and remain in the ideal bluing pH range of 7.0-8.0 longer for consistent results. 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. TruBlue is supplied in both a concentrate and ready to use formulation.

SHURStain™ Select Eosins

SHURStain™ Select Eosins are available in four different versions to accommodate the varying preferences in cytoplasmic staining. The standard SHURStain™ Select Eosin is an alcoholic eosin that allows for exceptional differentiation and contrast between cytoplasmic components and nuclei; staining the cytoplasm various shades of pink and red. Eosin LITE produces lighter staining of the cytoplasm compared to the standard SHURStain Select Eosin. Eosin LITE is great for those who prefer a more pastel appearance. Eosin Trichrome utilizes a three dye formulation for brighter, more vivid counterstaining. Eosin Phloxine produces a more reddish stain in the cytoplasm.

Prior to staining in eosin, tissue sections should be rinsed in alcohol. The concentration of the alcohol rinse can range from 70% to 80%. This helps reduce the negative effects on the eosin caused by carry over.

Excellent results can be obtained with one of the SHURStain™ Select Eosins with a staining time of 30 to 90 seconds. A staining time of 30 seconds is recommended as a starting point, with an increase of 30 second intervals until the desired color and density of the cytoplasm is achieved.

Recommended automated and manual histology staining procedure for SHURStain Select Hematoxylin & Eosin Staining System

	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	70 to 80% Ethanol	1 minute
8	Running H20 Wash	1 minute
9	Hematoxylin	2-5 minutes
10	Running H20 Wash	1 minute
11	Clarity	30-90 seconds
12	Running H20 Wash	1 minute
13	TruBlu	1 minute
14	Running H20 Wash	1 minute
15	70% to 80% Ethanol	45 seconds
16	Eosin	30-90 seconds
17	100% Ethanol	1 minute
18	100% Ethanol	1 minute
19	100% Ethanol	1 minute
20	Xylene*	1 minute
21	Xylene*	1 minute
22	Xylene*	1 minute

Final Step: Mount and Coverslip with SHURMount™ Mounting Media

XydeClear xylene substitute may be used in place of Xylene.

Times in Xylene substitutes may need to be extended.