S2•Histo™

Intended Use

S2•Histo™ is a dehydrating agent designed specifically for histology tissue sections. It causes optimum differentiation of eosin while effecting rapid and complete dehydration. When used as directed it produces ideal differentiation of eosin with multiple eosin hues of red, pinks and oranges.

General Information

S2•Histo™ is a dehydrant formulated to dehydrate tissue sections and differentiate eosin simultaneously. It rapidly dehydrates sections and at the same time differentiates eosin at the proper rate by balancing the rate of section dehydration with that of eosin differentiation. The ideal three color spectrum of Eosin Y is achieved: erythrocytes are bright red; collagen is pink; and smooth muscle is dull pink. When S2•Histo™ is used with BBC Special Eosin I™ or II™, the color spectrum is even broader: erythrocytes are bright red-orange; collagen is orange-pink; cytoplasmic membranes are bright pink; smooth muscle is dull pink; and the cellular cytoplasm of some cells, such as that of plasma cells, stains a metachromatic purple-violet. S2•Histo™ is alcohol-based and in some localities can be poured down the drain; always consult your local waste water disposal authority for instruction.

S2•Histo™ is also extremely cost effective. Because of its rapid rate of dehydration accompanied by its precise rate of differentiation of eosin, S2•Histo™ can dehydrate increased numbers of sections predictably with reproducible histologic results. This ability to dehydrate large numbers of sections is maintained when S2•Histo™ is used in combination with S3•Histo™ (the BBC clearant designed for staining.) S2•Histo™ is the dehydrant for tissue sections that you should use routinely in histology.

Packaging

Catalog #	Volume
4312	4x1 gal

Fixation Procedure

S2•Histo™ is compatible with all primary and secondary fixatives. For simplicity, we will describe the fixation procedure for 10% Neutral Buffered Formalin.

10% Neutral Buffered Formalin is a non-coagulative fixative. The buffering capacity of our 10% Neutral Buffered Formalin enhances staining by H&E and immunohistochemistry.

1. The biopsies or tissues should be added directly to the 10% Neutral Buffered Formalin. No other dilution or addition of other agents is necessary before use.
2. Small biopsies, such as bone marrow biopsies, should be fixed at least 3 hours prior to processing. Tissue blocks from large tissues, such as lymph nodes or spleen or breast or colon, are best fixed 10-12 hours, although fixation for 4-6 hours is often sufficient. Over-fixation is not a problem; however, tissues should generally not be fixed longer than one to two weeks.
3. No washing of tissues after fixation is necessary.
4. The fixed tissues should be processed by the standard processing schedules that may vary from one hour to 12 hours. Standard recommended BBC tissue processing schedules are available on request.
5. The schedule for staining tissues fixed with 10% Neutral Buffered Formalin is similar to the schedules published in standard texts of histology. Our suggested schedule follows.
6. Disposal of 10% Neutral Buffered Formalin should be the same as that used for fixatives containing formaldehyde. Consult your local waste water disposal authority for specific instructions.

Staining Procedure

BBC RECOMMENDED AUTOMATED AND MANUAL HISTOLOGY STAINING PROCEDURE FOR HARRIS HEMATOXYLIN AND EOSIN

*Initially deparaffinize tissue sections with BBC S1™ or Xylene

Step *	Solution	Time
1.	100% Alcohol	20 seconds
2.	100% Alcohol	20 seconds
3.	95% Alcohol	20 seconds
4.	95% Alcohol	20 seconds
5.	70% Alcohol	20 seconds
6.	Running H_2O Wash	30 seconds
7.	BBC Harris Hematoxylin	3-5 minutes
8.	Running H_2O Wash	1 minute
9.	BBC Acid Wash•Histo™	1 minute
	or BBC Acid Alcohol•Histo™	2-3 dips
10.	Running H_2O Wash	1 minute
11.	BBC Blueing Solution•Histo™	15 seconds
12.	Running H_2O Wash	1 minute
13.	70% Alcohol	30 seconds
14.	BBC Special Eosin I™ or II™, **or** Eosin Y, **or** Eosin Y w/ Phloxine B	45 seconds
15.	BBC S2•Histo™	20 seconds
16.	BBC S2•Histo™	20 seconds
17.	BBC S2•Histo™	20 seconds
18.	BBC S2•Histo™	20 seconds
19.	BBC S2•Histo™	20 seconds
20.	BBC S3™ or Xylene	20 seconds
21.	BBC S3™ or Xylene	30 seconds
22.	BBC S3™ or Xylene	30 seconds
23.	Mount and coverslip with Optic Mount I™ or an appropriate mounting medium.	

Note: Each or these reagents can be intermixed and used with other staining sequences and other manufacturer's reagents.