# Alcoholic Formalin 10%

**Catalog # 0400**

## Intended Use

Alcoholic Formalin 10% is designed to fix rapidly tissues that are hard to fix, such as fatty tissues, breast and colon. It also functions well as a primary fixative to fix tissues received late in the day and that must be processed quickly overnight. Alcoholic Formalin 10% can also be used on the tissue processor as a secondary fixative in the first station or after the initial fixative station(s).

## General Information

Alcoholic Formalin 10% is a rapid fixative designed to be used at the grossing station or tissue processors. It rapidly penetrates tissues prepared at the grossing station and accelerates fixation so that the first fixative on the processor completes the initial fixation process, even with large bloody specimens. Alcoholic Formalin 10% is ideal for bowel specimens and breast tissues. Breast, bowel and all fresh tissues benefit from the rapid fixation, which enhances subsequent dehydration and clearing. Additionally, it enhances retention of immunogenicity and improves routine staining with H&E.

Alcoholic Formalin 10% can provide a value added service of rapid pre-fixation prior to definitive cutting of large specimens. Specimens such as bowel and breast are difficult to cut in the fresh state, and large specimens frequently arrive at the grossing station late in the afternoon. When unfixed, bowel mucosa and submucosa are very soft and moveable and do not attach rigidly to the underlying muscularis propria; consequently, precise cutting of these in cassette-size tissue blocks is difficult. Cutting of tissue blocks can be greatly facilitated by prefixing these specimens with Alcoholic Formalin 10%. Following 1-2 hours in Alcoholic Formalin 10%, bowel and breast can be cut confidently into the proper block sizes. Other large specimens can be prefixed similarly prior to grossing and cutting.

Alcoholic Formalin 10% is compatible with all fixatives in which the tissues have been previously placed. It is also compatible with all dehydrating and clearing reagents. This is the ideal fixative for use at the grossing station for routine fixation, for rapid prefixing of large specimens prior to cutting, and for use on the tissue processor as a fixative and initial dehydrator.

## Packaging

| Catalog # | Volume |
|---|---|
| 0395 | 1 qt |
| 0400 | 1 gal |
| 0410 | 5 gal |

*Prefilled Specimen Containers are also available in various sizes.

## Fixation Procedure

Alcoholic Formalin 10% is a coagulative and non-coagualative fixative that can be used as a primary or secondary fixative.

**As a primary fixative:**

1. The biopsies or tissues should be added directly to the fixative. Generally it should be used similar to the way one would use formaldehyde as a fixative.
2. Overfixation is not a problem, and tissues can be left in Alcoholic Formalin 10% for weeks without deleterious effects. It can also be used as a storage medium for tissues following fixation.
3. No washing of tissues after fixation is necessary.
4. The fixed tissues should be processed by the same schedule used for routine formalin-fixed tissues.
5. The staining schedule for tissues fixed with Alcoholic Formalin 10% is the same as that used for formalin fixed tissues.

**As a secondary fixative at the cutting (grossing) station:**

1. Alcoholic Formalin 10% can be used at the grossing station as a secondary fixative. Simply place the prefixed tissues in Alcoholic Formalin 10% following cutting them into cassettes. The tissues can remain in Alcoholic Formalin 10% until placing them on the tissue processor.
2. Alcoholic Formalin 10% is compatible with all other fixatives.

**As a secondary fixative on the tissue processor:**

1. Alcoholic Formalin 10% can be used on the tissues processor either in the initial station, or following other fixatives and prior to the dehydrants. Alcoholic Formalin 10% will begin dehydration gently.
2. Alcoholic Formalin 10% is compatible with all other fixatives and with all dehydrants used on the tissue processor.

## 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™ **or** BBC Acid Alcohol•Histo™ | 1 minute |
| 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** | |
| 15. | Eosin Y, **or** Eosin Y with Phloxine B | 45 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 S2•Histo™ | 20 seconds |
| 21. | BBC S3•Histo™ or Xylene | 20 seconds |
| 22. | BBC S3•Histo™ or Xylene | 30 seconds |
| 23. | BBC S3•Histo™ or Xylene | 30 seconds |
| 24. | 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.