



Instructions for use

The Histology Stain Family is specifically designed for staining of histological tissue specimens. The staining products formulated using the highest grade and certified raw materials that will provide optimum results. Each and every raw material is tested to meet the industry's highest standards. Finished goods testing involve analytical, qualitative and quantitative analysis to ensure product quality, longevity, and lot-to-lot consistency. Each lot of stain also undergoes a functionality test to ensure the highest quality results. Enhanced packaging promotes product quality and longevity. All the stain products are ready to use and require no dilution. The Histology Stain Family is designed to produce optimal results when used together under the recommended guidelines.

Hematoxylin – Reserve (SL200)

This uniquely formulated and proprietary progressive nuclear stain is considered a hybrid hematoxylin product. It possesses the rapid staining qualities of the Gill type stain along with the familiar and the brilliant nuclear chromatin delineation of a Harris Hematoxylin type stain. Hematoxylin – Reserve does not require daily filtering, will not form sheens, and has no affinity for background or mucin staining. It can be used as a counter stain for immunohistochemistry procedures and can be used for a wide range of techniques. This stain has applications for both Histology and Cytology laboratories.

Hematoxylin – Vintage (SL100)

This progressive nuclear stain is designed to provide the end user with a uniquely formulated Hematoxylin stain that can be used in place of Gill type Hematoxylin. This rapid stain will provide unsurpassed nuclear chromatin detail with no affinity for background staining and does not require daily filtering. Hematoxylin - Vintage has applications for Histology and Cytology laboratories. It is also recommended for frozen section staining.

Hematoxylin-Vintage Select (SL106)

This progressive nuclear stain is designed to provide the end user with a uniquely formulated Hematoxylin stain that can be used to highlight mucin producing goblet cells of the digestive tract and other mucinous producing cells. This rapid stain does not have an affinity for background staining and does not require daily filtering.



Eosin Multichrome – Reserve (SL201)

Eosin Multichrome is uniquely formulated and proprietary, and provides a striking contrast and brilliant staining of all cytoplasmic components. The three dye combination (Eosin Y, Phloxine B and Orange G) will produce optimal results when used with the Hematoxylin products. It provides familiar and vibrant cytoplasmic staining and differentiation. It is alcoholic and acidified and a favorite of many pathologists and end users.

Vintage Eosin (SL101)

Vintage Eosin is specially formulated to provide a bright and consistent cytoplasmic stain while allowing only a short staining time with three distinct color variations. This stain will provide optimized cellular contrast and differentiation when used with the Hematoxylin products. It is an alcoholic and acidified cytoplasmic stain.

Bluing Reagent (Reserve & Vintage)

Bluing Reagent is a buffered alkaline rinse with a mild pH (8.0) that will ensure optimal staining and proper cellular hue staining. A one minute immersion time is recommended with a short water rinse afterward. Bluing Reagent is premixed and ready to use and will eliminate the common difficulties associated with other non-conventional bluing reagents.

Hi-Def (Acid Rinse) (SL103)

Hi-Def (Acid Rinse) is a glacial acetic acid based formulation that provides unparalleled crisp nuclear chromatin detail and eliminates any undesired background staining when used with Hematoxylin – Reserve and Hematoxylin - Vintage. It is premixed, ready to use and non-hazardous.

Hi-Def 1% (Acid Rinse) SL206

Hi-Def 1% (Acid Rinse) is a glacial acetic acid based formulation that provides unparalleled crisp nuclear chromatin detail and eliminates any undesired background staining when used with Hematoxylin-Reserve, Vintage and Vintage Select. It is particularly formulated for use with Linear Type stainers that require a longer staining time. It is premixed, ready to use and non-hazardous.

Staining Procedure (Histology):

| | |
|---|-------------|
| 1. Clearing Reagent | 2 minutes |
| 2. Clearing Reagent | 2 minutes |
| 3. Clearing Reagent | 2 minutes |
| 4. 100% Reagent Grade Alcohol | 1 minute |
| 5. 100% Reagent Grade Alcohol | 1 minute |
| 6. 100% Reagent Grade Alcohol | 1 minute |
| 7. 95% Reagent Grade Alcohol | 1 minute |
| 8. Water Rinse | 30 seconds |
| 9. Hematoxylin – Reserve or Vintage | 2.5 minutes |
| 10. Water Rinse | 1 minute |
| 11. Hi-Def (Acid Rinse) | 30 seconds |
| 12. Water Rinse | 1 minute |
| 13. Bluing Reagent – Reserve or Vintage | 1 minute |
| 14. Water Rinse | 1 minute |
| 15. 95% Reagent Grade Alcohol | 15 seconds |
| 16. Eosin Multichrome or Vintage Eosin | 30 seconds |
| 17. 100% Reagent Grade Alcohol | 1 minute |
| 18. 100% Reagent Grade Alcohol | 1 minute |
| 19. 100% Reagent Grade Alcohol | 1 minute |
| 20. Clearing Reagent | 1 minute |
| 21. Clearing Reagent | 1 minute |
| 22. Clearing Reagent | 1 minute |
| | Coverslip |

Nuclear Chromatin: Purple

Cytoplasm: Orange to Pink

The schedules provided are only suggestions – modifications may be necessary to fit personal preferences

Frozen Section Staining Procedure:

Rinse slides in water rinse for 4-5 dips

| | |
|--|----------|
| 1. Hematoxylin – Reserve or Vintage | 3-5 dips |
| 2. Water Rinse | 5-7 dips |
| 3. Bluing Reagent – Reserve or Vintage | 3-4 dips |
| 4. Water Rinse | 3-4 dips |



| | |
|---------------------------------------|-----------|
| 5. 95% Reagent Grade Alcohol | 3-4 dips |
| 6. Eosin Multichrome or Vintage Eosin | 1-2 dips |
| 7. Water Rinse | 1-2 dips |
| 8. 100% Reagent Grade Alcohol | 5-8 dips |
| 9. 100% Reagent Grade Alcohol | 5-8 dips |
| 10. Clearing Reagent | 10 dips |
| 11. Clearing Reagent | 10 dips |
| | Coverslip |

Nuclear Chromatin: Purple

Cytoplasm: Orange to Pink

The schedules provided are only suggestions – modifications may be necessary to fit personal preferences

Note:

- Product change is dependent on the end user's own quality assurance program. Generally, solutions should be changed every week for best results. Solutions should be covered when not in use. If last alcohol after the counter stain is pink or tinted, alcohols should be rotated or changed.
- Each raw material stain/dye is certified by the Biological Stain Commission.
- Protective clothing and other gear should be worn and the work area should be properly ventilated.
- Distilled or deionized water is preferred for use in the staining procedure. Tap water can contain contaminants that will affect staining quality. Fluctuations in pH of tap water can also affect staining quality.
- The Histology Stain Family can be used on any conventional automated staining instrument.
- Caution: Eosin Polychrome and Eosin-Y are Flammable Liquids. Keep containers closed when not in use. Store in flammable fire cabinet.
- Disposal for all staining reagents is in accordance to local, state, and federal regulations.