

StatLab Hematoxylin & Eosin 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. Hematoxylin - Vintage has applications for Histology and Cytology laboratories. It is also recommended for frozen section staining.

Hematoxylin-Vintage Plus (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.

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Select Hematoxylin (SL401)

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. Select Hematoxylin will not form sheens and has little affinity for background or mucin staining. It can be used as a counterstain for immunohistochemistry procedures and can be used for a wide range of techniques. This stain has applications for both Histology and Cytology laboratories. It is also recommended for frozen section staining.

Eosin Multichrome - Reserve (\$L201)

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.

Select Eosin-Y

Eosin-Y 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 and a favorite of many Pathologists and end users



Bluing Reagent (Reserve-SL203 & Vintage SL102)

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 nonconventional bluing reagents.

Select Bluing Reagent (SL403)

Select Bluing Rinse 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. Select Bluing Rinse is premixed and ready to use and will eliminate the common difficulties associated with other non-conventional bluing reagents. It is tinted blue for easy identification

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) \$L205

Hi-Def 1% (Acid Rinse) is a glacial acetic acid-based formulation that provides unparalleled crisp nuclear chromatin detain 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.

Select Acid Rinse

Select Acid Rinse is an acid rinse based formulation that provides unparalleled crisp nuclear chromatin detail and eliminates any undesired background staining when used with Select Hematoxylin. It is premixed and ready to use and non-hazardous.

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Staining Procedure (Reserve or Vintage-Histology):

Clearing Reagent	2 minutes
Clearing Reagent	2 minutes
Clearing Reagent	2 minutes
100% Reagent Grade Alcohol	1 minute
100% Reagent Grade Alcohol	1 minute
100% Reagent Grade Alcohol	1 minute
95% Reagent Grade Alcohol	1 minute
Water Rinse	30 seconds
Hematoxylin – Reserve or Vintage	2.5 minutes
Water Rinse	1 minute
Hi-Def (Acid Rinse)	30 seconds
Water Rinse	1 minute
Bluing Reagent – Reserve or Vintage	1 minute
Water Rinse	1 minute
95% Reagent Grade Alcohol	15 seconds
Eosin Multichrome or Vintage Eosin	30 seconds
100% Reagent Grade Alcohol	1 minute
100% Reagent Grade Alcohol	1 minute
100% Reagent Grade Alcohol	1 minute
Clearing Reagent	1 minute
Clearing Reagent	1 minute
Clearing Reagent	1 minute
	Coverslip
	Clearing Reagent Clearing Reagent 100% Reagent Grade Alcohol 100% Reagent Grade Alcohol 100% Reagent Grade Alcohol 95% Reagent Grade Alcohol Water Rinse

Results

Nuclear Chromatin: Purple

Cytoplasm: Orange to Pink

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

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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

Results

Nuclear Chromatin: Purple

Cytoplasm: Orange to Pink

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



Staining Procedure (Select Family of H&E Products-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 3-6 minutes 9. Select Hematoxylin 10. Water Rinse 1 minute 11. Select Acid Rinse 30-60 seconds 12. Water Rinse 1 minute 13. Select Bluing Rinse 1 minute 14. Water Rinse 1 minute 15. 95% Reagent Grade Alcohol 15 seconds 16. Select Eosin-Y 30-60 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

Results

Nuclear Chromatin: Purple Cytoplasm: Orange to Pink

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

personal preferences.



Select H&E Family -Frozen Section Staining Procedure:

Rinse slides in water rinse for 4-5 dips

1.	Select Hematoxylin	3-5 dips
2.	Water Rinse	5-7 dips
3.	Select Bluing Rinse	3-4 dips
4.	Water Rinse	3-4 dips
5.	95% Reagent Grade Alcohol	3-4 dips
6.	Select Eosin-Y	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

Results

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 (Reserve/Vintage/Select) 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. See SDS for more information.
- Call Technical Support at 800-442-3573 or email <u>ihctech@statlab.com</u> for assistance.