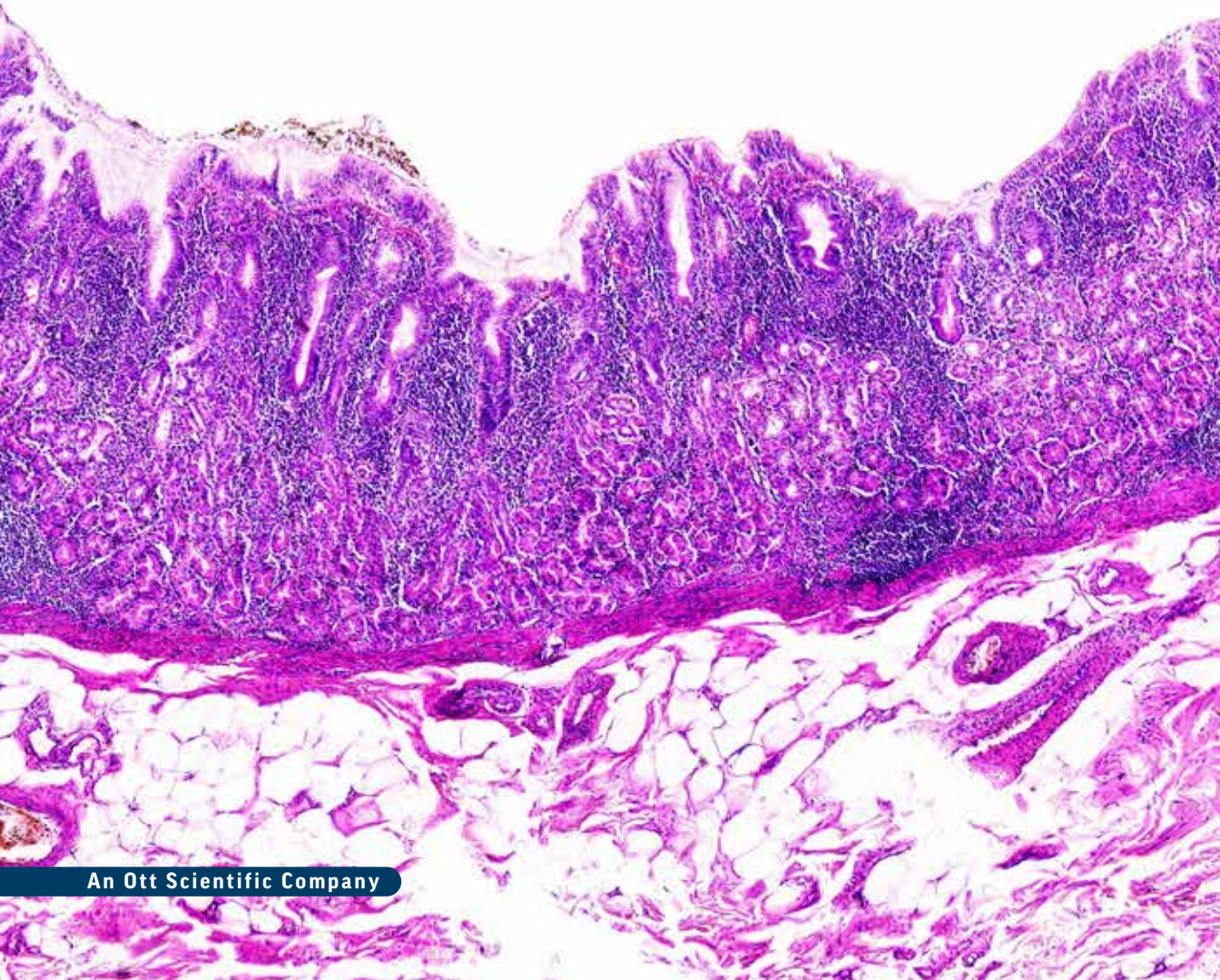




# Ethos Biosciences

HISTOLOGY CATALOG



## LOCATIONS

### North America

**Ethos Biosciences, Inc.**  
2070 Center Square Road  
Logan Township, NJ 08085  
800.441.0366  
info@ethosbiosciences.com

**Bangs Laboratories, Inc.**  
Fishers, IN  
info@bangslabs.com

**Polysciences, Inc.**  
Warrington, PA  
info@polysciences.com

### Brazil

**Ott Scientific Brasil**  
Indaiatuba - SP  
Brasil  
info@ottscientific.com.br

### Europe

**Polysciences Europe GmbH**  
Hirschberg an der Bergstrasse  
Germany  
info@polysciences.de

### Asia-Pacific

**Polysciences Asia-Pacific, Inc.**  
Taipei, Taiwan  
info@polysciences.tw

### India

**Ott Scientific India Pvt. Ltd.**  
Gurugram, Haryana  
India  
info@ottscientific.in

Founded through the acquisition of the Excell<sup>®</sup> diagnostics arm of Glycadia, Ethos Biosciences was established to continue the design, development and manufacture of high-quality, easy-to-use diagnostic test kits and reagents. In 2021, we expanded our mission and footprint by bringing legacy American Bionostica (LFA CDMO) and Astral Diagnostics (laboratory dyes and stains) businesses under the Ethos Biosciences umbrella.

Together with Bangs Laboratories and Polysciences, Ethos Biosciences is part of the Ott Scientific family of companies.



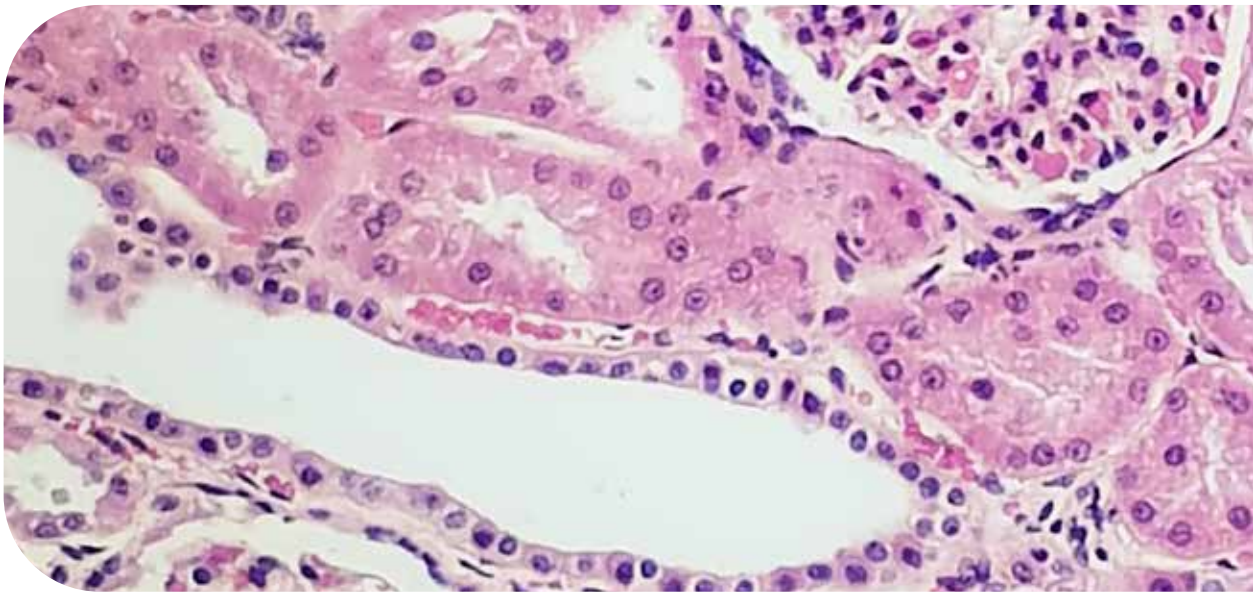
**Ott Scientific**  
CATALYZING INNOVATION

# HISTOLOGY

Ethos Biosciences manufactures the **Astral Diagnostics™** brand of diagnostic stains and laboratory reagents. For more than 20 years, our products have been used in academic, clinical and veterinary medical laboratories. We work with retail, bulk, private label and OEM customers, and our Custom & Contract services span formulation, packaging, kitting and fulfillment.

Our 126,000ft<sup>2</sup> facility in Logan Township, NJ houses state-of-the-art equipment for formulation, blending, liquids handling, and filling. On-site scientific, manufacturing and quality control staff lend expert support to every project, and our fully-equipped laboratories are available for application-related testing and troubleshooting. Moreover, global raw material procurement teams and domestic manufacturing offer exceptional supply chain security.

See our full list of product offerings at [EthosBiosciences.com](http://EthosBiosciences.com), or contact us at [info@ethosbioscience.com](mailto:info@ethosbioscience.com) to find how we can be of help in solving your latest challenge.



## SPECIMEN PREPARATION & PROCESSING

### Mohs Lab Staining Kit

Tissue staining is the cornerstone of Mohs Micrographic Surgery (MMS). Try our Mohs Lab Staining Kit, which includes high performance Astral Diagnostics' stains and reagents that will consistently yield slides with excellent morphology and differentiation of target cellular components. The kit includes marking dyes; freezing medium; bleaching reagents; both Hematoxylin and Eosin (H&E) and Toluidine Blue (T-blue) stains; and mounting medium. The Kit will take the specimen from dye marking, cryo-embedding, melanin bleaching, staining and mounting medium to a finished slide that can be viewed under the microscope within minutes.

Mohs Lab Staining Kit
7102 (1 Kit)

## Tissue Marking Dyes

Our Marking Dyes for Tissue are designed to perfect orientation of excised surgical specimens, which is highly beneficial to surgeons and pathologists testing for skin cancer. This method of marking multiple margins of specimens was originally documented by Dr. Frederic Mohs. Tissue marking dyes also provide a mode of identification, enabling more than one specimen to be processed in a single cassette, saving the lab technologist both time and materials.

Tissue Marking Dye
7562-02 (2 oz), Ultra Black
7563-02 (2 oz), Royal Blue
7564-02 (2 oz), Ruby Red
7565-02 (2 oz), Emerald Green
7566-02 (2 oz), Golden Yellow

## Tissue Marking Dye Sets

Our Marking Dyes for Tissue are designed to perfect orientation of excised surgical specimens, which is highly beneficial to surgeons and pathologists testing for skin cancer. This method of marking multiple margins of specimens was originally documented by Dr. Frederic Mohs. Tissue marking dyes also provide a mode of identification, enabling more than one specimen to be processed in a single cassette, saving the lab technologist both time and materials.

Tissue Marking Dye Set
7570-02 (5 x 2 oz), Ultra Black
7571-02 (5 x 2 oz), Royal Blue
7572-02 (5 x 2 oz), Emerald Green
7569-02 (5 x 2 oz), 5 Color Set

## Transport Media

### Michel's Transport Medium

A tissue transport medium used for preservation of biopsy specimens prior to further processing.

Michel's Transport Medium
7850-G (1 gal)

## Fixation

### B-5 Substitute

Mercury-free fixative used for lymphoid and hematopoietic tissue.

B-5 Substitute
3348 (32 oz)

### Bouins Fixative

Picric acid, formalin and acetic acid fixative. Bouins fixative is excellent for use in preserving soft and delicate tissue structures.

Bouins Fixative
3350-G (1 gal)

Approved for *in-vitro* diagnostic use [IVD].

### **Formalin 10%, Buffered**

Formalin 10% buffered is the most widely used fixative for routine processing of tissue in histology laboratories.

Formalin 10%, Buffered
3320-G (1 gal)
3320-5G (5 gal)

Approved for in-vitro diagnostic use [IVD].

### **Formalin 10%, Carson-Millonig**

Formalin 10% Carson-Millonig can be used as a dual purpose fixative, suitable for electron and light microscopy.

Formalin 10%, Carson-Millonig
3331-G (1 gal)

Approved for in-vitro diagnostic use [IVD].

### **Formalin 20%, Buffered**

Formalin 20% is a general-purpose fixative used for routine processing of tissue for light microscopy.

Formalin 20%, Buffered
3295-5G (5 gal)

Approved for in-vitro diagnostic use [IVD].

### **Formalin 20%, Non-Buffered**

Formalin 20% is a general-purpose fixative used for routine processing of tissue for light microscopy.

Formalin 20%, Non-Buffered
3296-5G (5 gal)

Approved for in-vitro diagnostic use [IVD].

### **Formalin Concentrate**

Formalin Concentrate is a general-purpose fixative used for routine processing of tissue for light microscopy.

Formalin Concentrate
3322-G (1 gal)

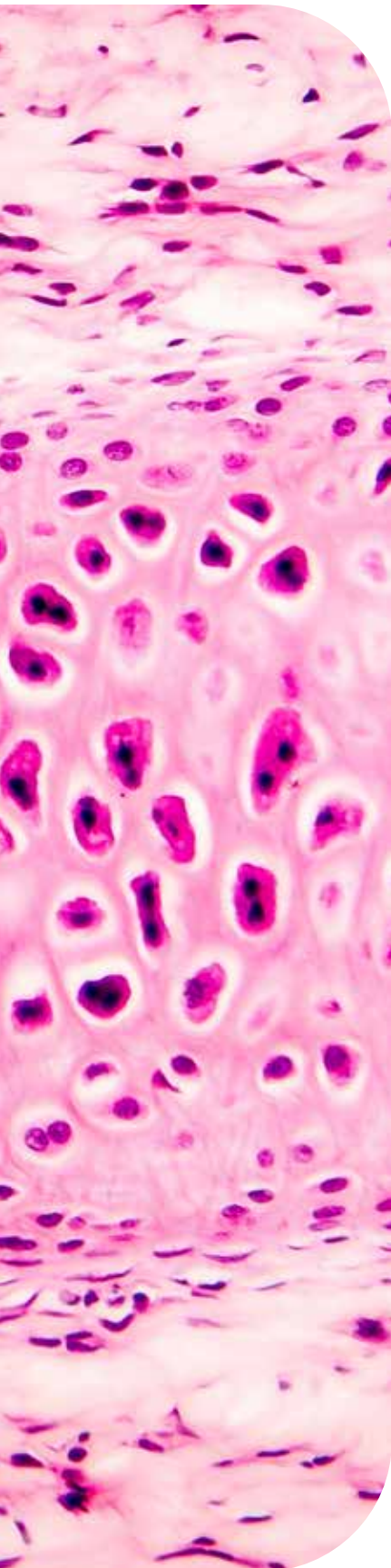
Approved for in-vitro diagnostic use [IVD].

### **Formaldehyde 37%**

Suitable for both electron and light microscopy. Easily penetrates large blocks of tissue. When used in combination with glutaraldehyde, it fixes delicate tissues such as brain in vascular perfusion. Avoids the problem of having to depolymerize paraformaldehyde.

Formaldehyde 37%
3323-G (1 gal)
3323-5G (5 gal)

Approved for in-vitro diagnostic use [IVD].



## Dehydration

### Reagent Alcohol

A blend of ethanol containing 5% isopropanol and 5% methanol. For various applications primarily in Histo/Cyto specimen processing.

Reagent Alcohol
3335-G (1 gal)
3335-5G (5 gal)

*This product may have a hazardous shipping charge.*

### Ethanol Solution, 50%

Ethanol Solution 50% is useful as a dehydrating reagent.

Ethanol Solution, 50%
3336-G (1 gal)

*This product may have a hazardous shipping charge.*

### Ethanol Solution, 70%

Ethanol Solution 70% is useful as a dehydrating reagent.

Ethanol Solution, 70%
3337-G (1 gal)

*This product may have a hazardous shipping charge.*

### Ethanol Solution, 80%

Ethanol Solution 80% is useful as a dehydrating reagent.

Ethanol Solution, 80%
3338-G (1 gal)

*This product may have a hazardous shipping charge.*

### Ethanol Solution, 95%

Ethanol Solution 95% is useful as a dehydrating reagent.

Ethanol Solution, 95%
3340-G (1 gal)

*This product may have a hazardous shipping charge.*

### Ethanol Solution, 100%

Ethanol Solution 100% is useful as a dehydrating reagent.

Ethanol Solution, 100%
3341-G (1 gal)
3341-5G (5 gal)

*This product may have a hazardous shipping charge.*

## Clearing

### Xylene

Xylene is a routine clearing agent. Useful for tissue processing and staining procedures.

Xylene
3346-G (1 gal)

### Clear-Sub™ (Xylene Substitute)

Clear-Sub (Xylene Substitute) is an aliphatic hydrocarbon mixture that can substitute for some applications as xylene. It can be used for processing, deparaffinization and clearing after staining. No change in incubation times are necessary when using Clear-Sub (Xylene Substitute) to replace xylene.

Clear-Sub has less odor and lower evaporation rate than xylene. Clear-Sub is more sensitive against water in solvents (turbidity can occur), therefore, it is essential to avoid technical grades of solvents.

Clear-Sub™ (Xylene Substitute)
3344-G (1 gal)

## Decalcifiers

### Decalcifier, Formic Acid

Mild decalcifying solution. Ideal for removing calcium from bone marrow and small bones.

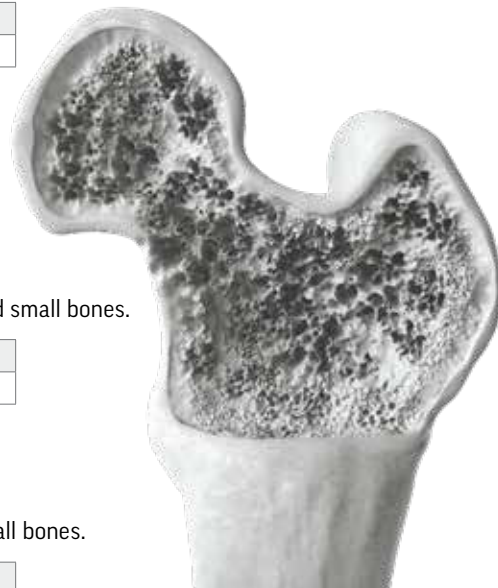
Decalcifier, Formic Acid
3360 (1 gal)

*Approved for in-vitro diagnostic use [IVD].*

### Decalcifier, Hydrochloric Acid

Decalcifying solution. Ideal for removing calcium from bone marrow and small bones.

Decalcifier, Hydrochloric Acid
3363 (1 gal)



## Freezing & Embedding

### SubZero-Matrix Tissue Freezing Medium

Our SubZero-Matrix Tissue Freezing Medium freezes quickly without crystallization, specific formula reduces curling, allowing easier pickups of flat serial sections. Convenient flip cap for improved ease of use.

SubZero-Matrix Tissue Freezing Medium
7568 (1 case)

*Case Contains: 6 x 4oz*

## Paraffin Wax 56, Histology Grade

This is a mixture of fine paraffin waxes and copolymer alloys in convenient pellets. Our paraffin wax produces ultra-thin compression-free ribbons. It functions flawlessly in pressure/vacuum fluid flow processors and tissue embedding centers.

Paraffin Wax 56, Histology Grade
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9309-02, 2 Kg bag
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9309-08, 8 Kg bag
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Melting Point: 56 - 58°C

## Bleaching

### Melanin Bleach Kit

Our melanin bleaching kit saves time by removing melanin pigment prior to staining. Reveal cellular morphology obscured by melanin pigment. This product is useful for immunohistochemistry and special staining.

Melanin Bleach Kit
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7567 (2 x 8oz)
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## STAINING

## Eosin Solutions

### Eosin Y, 1% Alcoholic

Eosin Y 1% Alcoholic is a cytoplasmic stain that when used in the hematoxylin and eosin staining procedure provides excellent definition of cell components in shades of red and pink. It is an excellent cytoplasmic stain which provides great contrast to the purple nuclei stained with hematoxylin.

Eosin Y, 1% Alcoholic
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7006 (1 gal)
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*This product may have a hazardous shipping charge.*

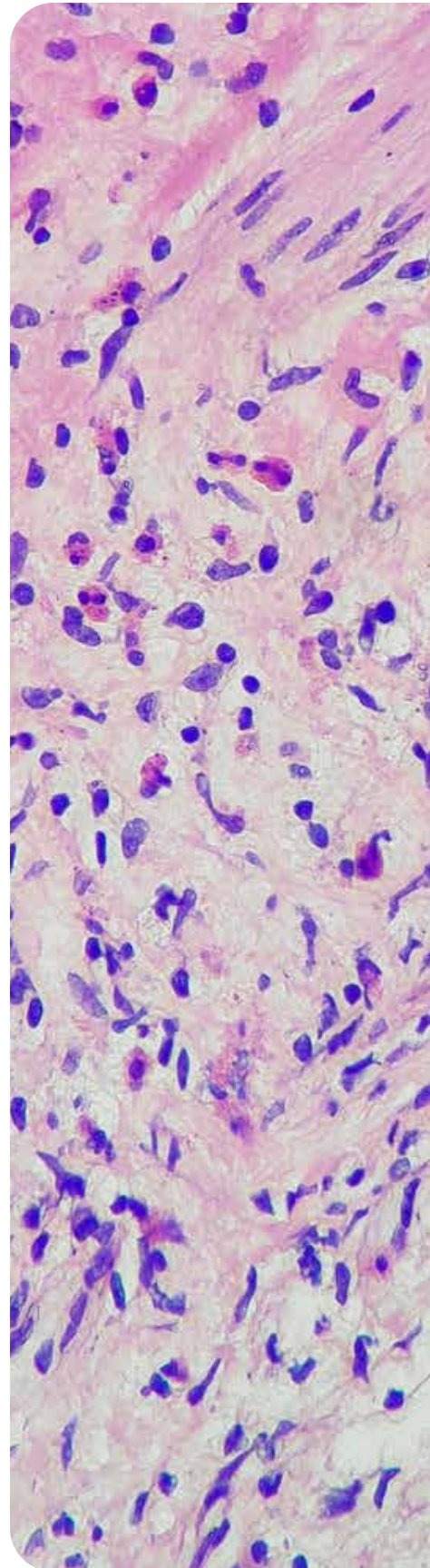
### Eosin Y, Intensified

Intensified Eosin has been formulated to provide the user with increased definition of the cytoplasmic components. This innovative modified eosin counterstain is substituted for Eosin Y 1% Alcoholic in the staining procedure. Timing may be varied to achieve the desired staining intensity.

Eosin Y, Intensified
----------------------

7007 (1 gal)
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*This product may have a hazardous shipping charge. Approved for in-vitro diagnostic use [IVD].*





### Hematoxylin Harris Hg Free

Hematoxylin Harris Hg Free is a general-purpose nuclear stain, regressive type. Used with hematoxylin and eosin staining.

Hematoxylin Harris Hg Free
7000-16 (16 oz)
7000-G (1 gal)

Approved for in-vitro diagnostic use [IVD].

### Hematoxylin Harris, Hg Free, Acidified

Hematoxylin Harris, Hg Free, Acidified is a general purpose nuclear stain, regressive type. Hematoxylin is a positively charged dye that appears as a purple-to-blue stain color on tissue samples. Hematoxylin adheres to the DNA and nucleoprotein-holding cell nucleus and highlights RNA-containing organelles. This stain is a modified progressive hematoxylin that has been optimized to achieve a vivid color in as little as 3 to 5 minutes.

Hematoxylin Harris, Hg Free, Acidified
7002-16 (16 oz)
7002-G (1 gal)
7002-5G (5 gal)

Approved for in-vitro diagnostic use [IVD].

### Hematoxylin Gill 2X

General-purpose nuclear stain, progressive type. Used with hematoxylin and eosin staining. Gill 2X and Gill 3X should be used when a stronger or darker nuclear stain is required for histology.

Hematoxylin Gill 2X
7013-16 (16 oz)
7013-G (1 gal)

Approved for in-vitro diagnostic use [IVD].

### Hematoxylin Gill 3X

General-purpose nuclear stain, progressive type. Used with hematoxylin and eosin staining. Gill 2X and Gill 3X should be used when a stronger or darker nuclear stain is required for histology.

Hematoxylin Gill 3X
7014-16 (16 oz)
7014-G (1 gal)
7014-5G (5 gal)

Approved for in-vitro diagnostic use [IVD].

## Hematoxylin Mayer's, Classical

General-purpose nuclear stain. Useful as a counterstain for immunohistochemistry.

Hematoxylin Mayer's, Classical
7021-16 (16 oz)
7021-G (1 gal)
7021-5G (5 gal)

Approved for in-vitro diagnostic use [IVD].

## Hematoxylin Mayer's

General-purpose nuclear stain. Useful as a counterstain for immunohistochemistry.

Hematoxylin Mayer's
7015-16 (16 oz)
7015-G (1 gal)
7015-5G (5 gal)

Approved for in-vitro diagnostic use [IVD].

## Hematoxylin Powder, Certified

Certified hematoxylin powder used to produce hematoxylin stain. Commonly used for the H&E staining procedure.

Hematoxylin Powder, Certified
7575-25 (25g)
7575-100 (100g)

## Specialty Stains

### Alcian Blue

Alcian Blue is primarily used for demonstrating acid mucopolysaccharides, specifically, it is used to visualize acidic epithelial and connective tissue mucins. Alcian blue has a copper-containing phthalocyanine ring linked to four isothiuronium groups which have a positive charge. The product is a 3% acetic acid solution with a pH of 2.5 which will stain both sulphated acid mucopolysaccharides and glycoproteins. This assists with the diagnosis of Barrett's esophagus, mesothelioma, atherosclerosis and adenocarcinomas. Alcian blue will color the acidic mucins blue but will not color neutral mucins. When combine with PAS, Periodic Acid Schiff, the neutral cells will stain magenta. It is also used in electrophoresis for detecting glycoproteins. pH 2.5.

Alcian Blue
7022-16 (16 oz)
7022-32 (32 oz)

Approved for in-vitro diagnostic use [IVD].

### Eosin - Phloxine

Eosin-Phloxine has been formulated to provide the user with increased definition of the cytoplasmic components. This innovative modified eosin counterstain is substituted for Eosin Y 1% Alcoholic in the staining procedure. Timing may be varied to achieve the desired staining intensity.

Eosin - Phloxine
7009 (1 gal)

This product may have a hazardous shipping charge. Approved for in-vitro diagnostic use [IVD].

### Eosin Nigrosin Semen Stain

Eosin Nigrosin is a staining technique that assesses the vitality of a sperm sample.

Eosin Nigrosin Semen Stain
5592 (16 oz)

For Professional Use Only. Approved for in-vitro diagnostic use [IVD].

## Gomori Trichrome Stain

It is a histological staining method that uses two or more acid dyes in conjunction with a polyacid. One step stain (Gomori method) is used to distinguish between collagen fibers and smooth muscle in tissue sections. Bouin's fixative is generally used as a mordant with this process. The Gomori Trichrome method provided a shorter staining process to Masson's Trichrome method, yielding similar results. The Gomori Trichrome demonstrates the collagen fibers in a brilliant green shade. This color option is unique to the Gomori Trichrome method.

Gomori Trichrome Stain
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6900-16 (16 oz)
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Approved for in-vitro diagnostic use [IVD].

## Verhoeff Van Gieson Elastin Stain Kit

The Verhoeff Van Gieson Elastin stain is useful in demonstrating atrophy of elastic tissue and the thinning and loss of elastic fibers. Tissue is stained with a regressive hematoxylin consisting of ferric chloride and iodine. Ferric chloride and iodine act as mordants and aid in the oxidation of hematoxylin to hematin, which is responsible for staining elastic elements. The differentiating is accomplished by using excess mordant, ferric chloride, to break the tissue-mordant dye complex. The dye will be attracted to the larger amount of mordant in the differentiating solution and is removed from the tissue. The elastic tissue has the strongest affinity of the iron-hematoxylin complex and will hold onto the dye longer than the other tissue elements. Sodium thiosulfate is used to remove any excess iodine.

Kit contains:

Solution A - 5% Alcoholic Hematoxylin,

Solution B - 10% Aqueous Ferric Chloride,

Solution C - Iodine Solution,

Solution D - 5% Sodium Thiosulphate,

Solution E - Counterstain I,

Solution F - Counterstain II.

Verhoeff Van Gieson Elastin Stain Kit
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25089 (1 kit)
---------------

Approved for in-vitro diagnostic use [IVD].

## PAS

### Periodic Acid 0.5%

Generally used in Periodic Acid Schiff (PAS) staining, prior to staining with Schiff's Reagent.

Periodic Acid 0.5%
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3376-16 (16 oz)
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Approved for in-vitro diagnostic use [IVD].

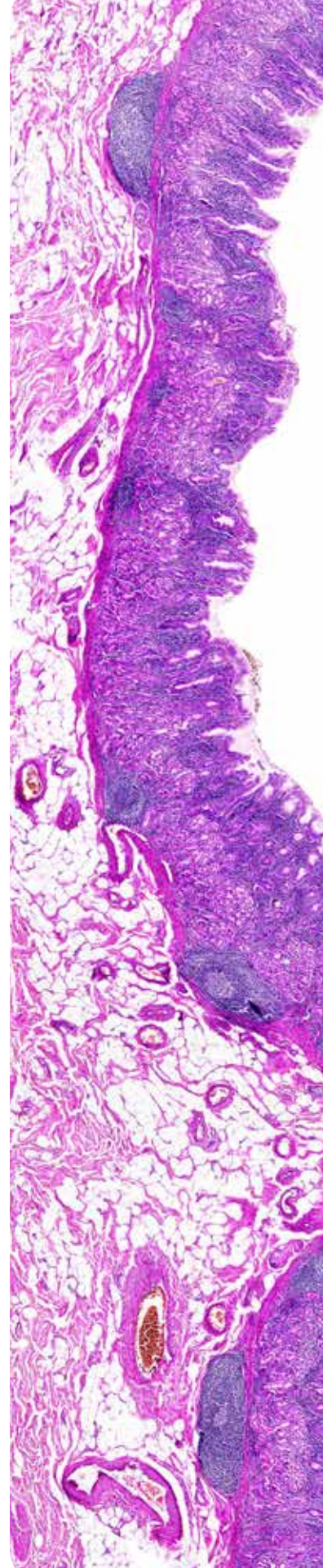
### Periodic Acid 1%

Generally used in Periodic Acid Schiff (PAS) staining, prior to staining with Schiff's Reagent.

Periodic Acid 1.0%
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3377-16 (16 oz)
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Approved for in-vitro diagnostic use [IVD].



### Schiff's Reagent

Schiff's Reagent is used in the Periodic Acid Staining Procedure. Intended for use with blood, bone marrow, tissue touch preparations or routine tissue sections.

Schiff's Reagent
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3378-G (1 gal)
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Approved for in-vitro diagnostic use [IVD].

## Staining Reagents, Bluing

### Bluing Reagent

Lithium carbonate solution used to provide crisp nuclear detail to cells.

Bluing Reagent
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3356-G (1 gal)
----------------

This product may have a hazardous shipping charge. Approved for in-vitro diagnostic use [IVD].

### AQUAbluing™ Reagent

Bluing reagent at pH 8.0 used to provide crisp nuclear detail.

AQUAbluing Reagent
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3357 (1 gal)
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Approved for in-vitro diagnostic use [IVD].

## Staining Reagents, Clarifying

### Acetic Acid 3%, 5%

Acetic Acid is a general reagent useful in many histological staining procedures. Available in various concentrations (3%, 5%) for your research needs.

Acetic Acid 3%
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3301 (16 oz)
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3301-G (1 gal)
----------------

Acetic Acid 5%
----------------

3303-16 (16 oz)
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### CLEARview™, Histological Clarifier

Differentiation solution for removing excess hematoxylin from tissue to accentuate cell structure and clarity. Differentiation in less than 60 seconds.

CLEARview™, Histological Clarifier
7023-G (1 gal)

Approved for in-vitro diagnostic use [IVD].

### Acid Alcohol Solution

Differentiation solution for removing excess hematoxylin from tissue to accentuate cell structure and clarity. Differentiation in less than 60 seconds.

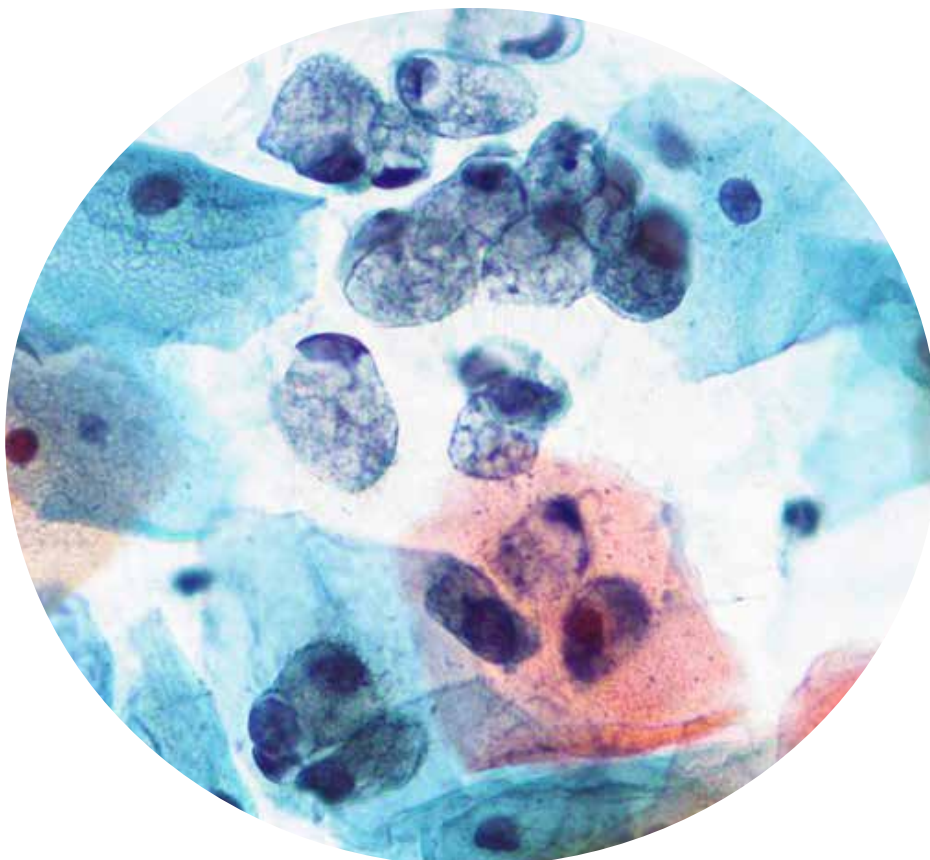
Acid Alcohol Solution
7560-G (0.5% Concentration) (1 gal)
7560-G (1.0% Concentration) (1 gal)

## Mounting Mediums

### Acrylic Mounting Medium

Histo/Cryo Mounting Medium in a toluene matrix using an acrylic resin for coverslipping.

Acrylic Mounting Medium
3349-04 (4 oz)
3349-16 (16 oz)



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## Trademarks

Ethos Biosciences™  
Astral Diagnostics™  
AQUAbluing™  
Clear-Sub™  
CLEARview™

## About Us

Ethos Biosciences manufactures the Astral Diagnostics brand of diagnostic stains and laboratory reagents. For more than 20 years, our products have been used in academic, clinical and veterinary medical laboratories. We work with retail, bulk, private label and OEM customers, and our Custom & Contract services span formulation, packaging/kitting and fulfillment.

### **Our Commitment to Service**

We are uniquely positioned to offer highest-level technical support and troubleshooting assistance. We have a deep understanding of dye and stain formulations and ensure each new batch has the highest quality. Ethos' Astral Diagnostics products are supported by fully-equipped, on-site laboratories that are staffed with analytical chemists and accredited Medical Laboratory Scientists and Histologists. We understand the laboratory ecosystem, and are able to provide truly authentic support to our customers. We're happy to assist with product selection or protocol review, and will take our troubleshooting to the bench if a deeper investigation is required.

### **Our Commitment to Quality**

At Ethos Biosciences, quality extends far beyond basic dye formulation and concentration checks. Our fully-integrated program ensures control from start to finish—it begins with raw materials, and encompasses dye and reagent formulation, manufacturing and quality control. Product QC is comprehensive, with performance testing that features actual specimens to ensure that dyes meet expected intensity and cellular component differentiation criteria. For Ethos, Quality isn't simply a claim—it's the cornerstone of our philosophy and our commitment to you.

### **Our Commitment to Customers**

At the end of the day, we do all of these things for one purpose: to serve our valued customers. We invite you to contact us with any questions, or to browse the Resources section of the website for protocols and other support documents. Our application experts are also available to assist with technical questions. Contact us at [info@ethosbiosciences.com](mailto:info@ethosbiosciences.com) or 800-441-0366.

Testing solutions in support of a healthy world!

Ethos Biosciences' facility is a registered **Food and Drug Administration Establishment**, and our Quality Management System has been certified to comply with **ISO 13485:2016**.





# Ethos Biosciences

2070 Center Square Road  
Logan Township, NJ 08085  
800.441.0366  
info@ethosbiosciences.com

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