

An Ott Scientific Company

# LOCATIONS

# **North America**

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# India

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Founded through the acquisition of the Exocell' 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 Bio umbrella.

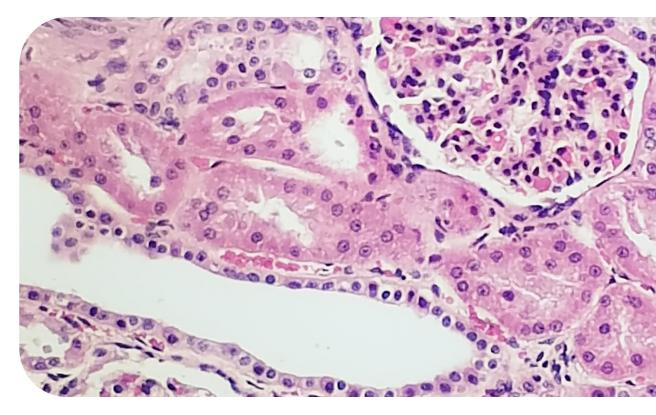
Together with Bangs Laboratories and Polysciences, Ethos Biosciences is part of the Ott Scientific family of companies.



# 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.

See our full list of product offerings at EthosBiosciences.com, or contact us at 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), Utra 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.

3350-G (1 gal)	

## 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)

## 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)	

#### 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)	

## 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)

#### Formalin Concentrate

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

Formalin Concer	htrate
3322-G (1 gal)	

#### Formaldehyde 37%

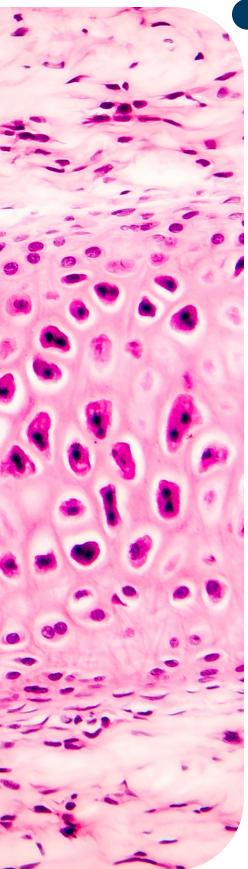
Suitable for both electron and light microscopy. Easily penetrates large blocks of tissue. When used in combination with glutaraldehyde, it fixes delicate tissues such as brain in vascular perfusion. Avoids the problem of having to depolymerize paraformaldehyde.

Formaldehyde 37%	
3323-32 (32 oz)	
3323-G (1 gal)	

#### Hematoxylin Mayer's

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

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



# 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)
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 same 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)	

#### **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

# Polyfin<sup>®</sup> Paraffin

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

1	Polyfin <sup>®</sup> Paraffin
	7573 (1 case)

Case Contains: 8 x 1Kg

# Bleaching

## **Melanin Bleach Kit**

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

Melanin Bleach Kit

7567 (2 x 8oz)

# 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
7006 (1 gal)
This product may have a hazardous shipping charge.

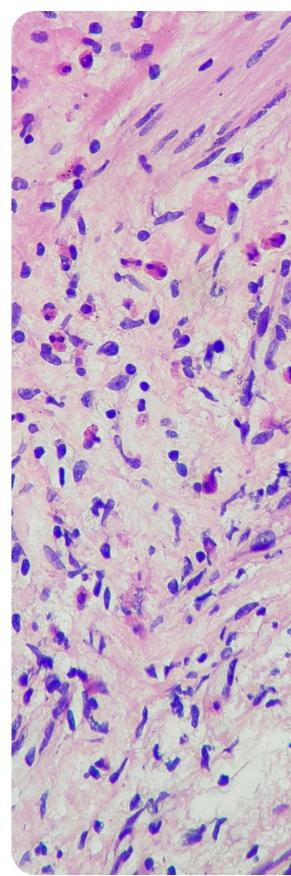
## **Eosin Y, Intensified**

Intensified Eosin and Eosin-Phloxine have been formulated to provide the user with increased definition of the cytoplasmic components. These innovative modified eosin counterstains are substituted for Eosin Y 1% Alcoholic in the staining procedure. Timing may be varied to achieve the desired staining intensity.

Eosin Y, Intensified
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7007 (1 gal)

This product may have a hazardous shipping charge.



#### 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)

### Hematoxylin Harris, Hg Free, Acidified

General-purpose nuclear stain, regressive type. Used with hematoxylin and eosin staining.

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

#### 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)

#### 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)	

## 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)

## 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. It is also used in electrophoresis for detecting glycoproteins. pH 2.5.

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

## **Eosin - Phloxine**

Intensified Eosin and Eosin-Phloxine have been formulated to provide the user with increased definition of the cytoplasmic components. These innovative modified eosin counterstains are 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.

#### **Eosin Nigrosin Semen Stain**

Eosin Nigrosin is a staining technique that assesses the vitality of a sperm sample. For Professional Use Only.

Eosin Nigrosin Semen Stain
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5592 (16 oz)

For Professional Use Only.

#### **Nuclear Fast Red**

Nuclear fast red staining is a simple method of nuclear chromatin staining and is mainly used for high-contrast counterstaining for histological applications.

Nuclear Fast Red	
3374-04 (4 oz)	
3374-16 (16 oz)	

## 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 6900-16 (16 oz)

## Verhoeff Van Gieson Elastin Stain Kit

The Verhoeff Van Gieson Elastin stain is useful in demonstrating atrophy of elastic tissue in cases of emphysema, thinning and loss of elastic fibers in arteriosclerosis and other vascular diseases. 500 ml kit stains up to 120 slides.

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 25089 (1 kit)

# PAS

#### Periodic Acid 0.5%

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

Periodic Acid 0.5% 3376-16 (16 oz)

#### Periodic Acid 1%

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

Periodic Acid 1.0%

3377-16 (16 oz)

## **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	
3378-G (1 gal)	

# Staining Reagents, Bluing

#### **Bluing Reagent**

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

Bluing Reagent

3356-G (1 gal)

This product may have a hazardous shipping charge.

## **AQUAbluing Reagent**

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

AQUAbluing Reagent 3357 (1 gal)

# 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%
3301 (16 oz)
3301-G (1 gal)
Acetic Acid 5%
3303-16 (16 oz)



## **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)

## **Acid Alcohol Solution**

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

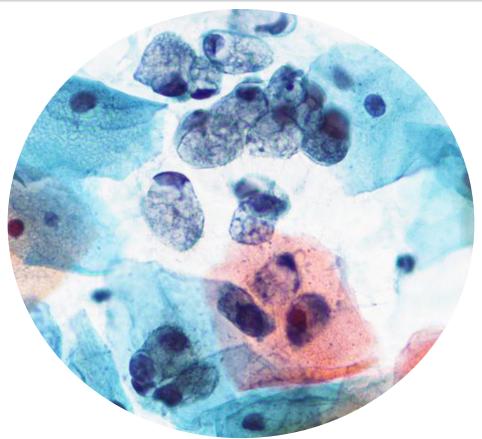
Acid Alcohol Solution
7561-G (0.5% Concentration) (1 gal)
7560-G (1.0% Concentration) (1 gal)

# **Mounting Mediums**

## **Acrylic Mounting Medium**

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

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



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#### Trademarks

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Polysciences, Inc. Polyfin®

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# 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. As a manufacturer, we have a deep understanding of dye and stain formulations; this also enables us to achieve highest quality standards for our products. Ethos' Astral Diagnostics products are supported by fully-equipped, on-site laboratories that are staffed with experienced technicians. 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 You**

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 info@ethosbiosciences.com or 800-441-0366.

We look forward to working with you—we're happy to help!



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