



Simple Solution for Your Research

## **Hito Van Gieson Stain**

[Catalog Number: HTSHS0116]

An easy to use staining solution for the collagen staining on frozen and paraffin sections

### **User Manual And Material Safety Data Sheet**

FOR IN VITRO RESEARCH USE ONLY

**Hitobiotec Corp.**



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## **I. Introduction**

Hito Van Gieson Solution is designed based on the Van Gieson staining method with improved and simplified procedures. This solution can be used for simultaneously demonstrating the morphological details of collagen fibers.

Hito Van Gieson Solution is made in a ready-to-use format and provides high quality, reliable and sensitive staining of collagen fibers (no counterstain for nuclei).

Hito Van Gieson Solution has been tested extensively on the tissues from several species of animals and it is a simple solution for your research.

For photo samples, please visit our web site at  
[www.hitobiotec.com](http://www.hitobiotec.com)

## **II. Contents**

### **Store Hito Van Gieson Solution at room temperature**

Solution	250 ml
User Manual and MSDS	1

### III. Staining Procedure

#### Staining

**(For Fixed, non-Fixed frozen sections and paraffin sections)**

1. Place slides in xylene two times, 5 minutes each.
2. Place slides in 100% ethanol two times, 3 minutes each.
3. Place slides in 95% ethanol two times, 3 minutes each.
4. Place slides in 75% ethanol for 3 minutes.
5. Place slides in 50% ethanol for 3 minutes.
6. Rinse slides in double distilled water for 3 minutes.
7. Place slides in Hito Van Gieson Stain Solution for 1-3 minute.
8. Dip slides in 95% ethanol to differentiate (Dip for about 3-4 times).



#### **Note**

This This differentiation should be carefully performed, because yellow tissue staining will fade rapidly, check under microscope and if over differentiated, return to Step 6.

9. Dehydrate slides in 100% ethanol, three times, 3 minutes each.
10. Clear in xylene, two times, 4 minutes each, and apply coverslip over sections using xylene based resinous mounting medium.
11. Allow to dry. The slide can be viewed after drying by bright field microscopy.

#### **Results:**

Collagen: Red

## IV. Material safety data sheet (MSDS)

Date Updated: 11/21/2015  
Version 1.1

### 1. Product and Company Information

**Product Name** Hito Van Gieson Stain  
**Product Number** HTSHS0116  
**Brand** Hitobiotec  
**Company Address** Hitobiotec Corp.  
P.O.Box 7528  
Kingsport, TN 37664  
USA  
**Technical Phone:** 423-520-6880  
**Emergency Phone:** 423-520-6880

### 2. Composition and Information on Ingredient

<b>Substance Name</b>	<b>CAS #</b>	<b>SARA 313</b>
Hito Van Gieson Stain	None	No

<b>Ingredient Name</b>	<b>CAS #</b>	<b>SARA 313</b>
WATER	7732-18-5	No
PROPRIETARY COMPONENT(S)	None	No
Acid Fuchsin	3244-88-0	No
Picric Acid	88-89-1	Yes

### 3. Hazards Identification

#### EMERGENCY OVERVIEW

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation

#### HMIS RATING

HEALTH: 1      FLAMMABILITY: 0      REACTIVITY: 0

#### NFPA RATING

HEALTH: 1      FLAMMABILITY: 0      REACTIVITY: 0



## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

### **Environmental precautions**

Do not let product enter drains.

### **Methods for cleaning up**

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### **Handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Wear glasses and disposable gloves while handling kit reagents. Wash hands thoroughly after performing the test.

### **Storage**

Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

no data available

### **Personal protective equipment**

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Hand protection**

Handle with gloves.

#### **Eye protection**

Safety glasses with side-shields conforming to EN166

#### **Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES



**Appearance**

Form liquid

**Safety data**

pH no data available  
Melting point no data available  
Boiling point no data available  
Flash point no data available  
Ignition temperature no data available  
Lower explosion limit no data available  
Upper explosion limit no data available  
Water solubility no data available

## 10. STABILITY AND REACTIVITY

**Storage stability**

Stable under recommended storage conditions.

**Materials to avoid**

Strong oxidizing agents, Heat, flames and sparks.

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity** Refer to component MSDS

**Irritation and corrosion** Refer to component MSDS

**Sensitisation** Refer to component MSDS

**Signs and Symptoms of Exposure**

no data available

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye burns, eye irritation.

**Ingestion** Toxic if swallowed.

## 12. ECOLOGICAL INFORMATION

### **Elimination information (persistence and degradability)**

Refer to component MSDS

### **Ecotoxicity effects**

Refer to component MSDS

### **Further information on ecology**

Refer to component MSDS

## 13. DISPOSAL CONSIDERATIONS

### **Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

### **Contaminated packaging**

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### **DOT (US)**

Not dangerous goods

### **IMDG**

Not dangerous goods

### **IATA**

Not dangerous goods

## 15. OTHER INFORMATION

### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Hitobiotech, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See Terms & Conditions page on our website for additional terms and conditions of sale.



## **Hitobiotec Corp.**

P.O.Box 7528  
Kingsport, Tennessee  
U.S.A.

Phone: 423-520-6880

Email: [info@hitobiotec.com](mailto:info@hitobiotec.com)

[www.hitobiotec.com](http://www.hitobiotec.com)

