

# 1% Eosin Y (Stock Solution) **Alcohol Based**

### PRODUCT INFORMATION:

PS029 500ml PS029 250ml 125ml PS029

## INTENDED USE

### For Laboratory use only

1% Eosin Y (Stock Solution) alcohol based is used for histopathological diagnosis and serves as differential stain in most of the histopathology and cytopathology laboratories The hematoxylin and eosin (H&E) staining method is the method most frequently used for the staining of histology material. This Eosin Y solution is a 1% alcoholic staining solution, that can be used e. g. for the histological staining of instantaneous sections. Unstained structures are relatively low in contrast and are extremely difficult to distinguish under the light microscope. The images created using the staining solutions help the authorized and qualified pathologist to better define the form and structure in such cases. Further examinations may be necessary to reach a definitive diagnosis.

## SUMMARY

The staining mechanism behind the H&E staining is a physico-chemical process. In the first step, the positively charged nuclear dye (hematoxylin) binds to the negatively charged phosphate groups of the nucleic acid of the cell nucleus. The nuclei will be dyed dark blue to dark violet. The second step is the counterstaining with negatively charged anionic Eosin Y, a xanthene dye. Eosin binds to the positively charged plasma proteins. Cytoplasm and intercellular substances are stained pink to red, while erythrocytes will appear with yellow to orange color.

## DESCRIPTION

PathnSitu's 1% Eosin Y alcohol based is stock solution provided in 3 different pack sizes i.e 125ml, 250ml and 500ml

### **STORAGE**

Store at Room Temperature. Do not use after expiration date printed on the bottle. If reagents are stored under conditions other than those specified in the package insert, the user must verify them. Further dilution of this solution may lead to sub optimal staining.

# REAGENT PREPARATION

Preparation of Eosin Y working solution. For 100ml of Eosin Y Working solution, Add 25 mL of eosin Y stock solution to 74.5 mL of 80% ethanol and mix well. While working in a fume hood, add 0.5 mL of glacial acetic acid and mix well. Store covered at room temperature.

## STAINING PROCEDURE

- Cover tissue sections or cell preparations for 8-10 minutes with Hematoxylin. 1.
- Rinse under tap water to remove excess reagent.
- Place the slides in 1% acid alcohol for 2-3 seconds or a gentle dip.
- Rinse the slides in running tap water for 2 minutes.
- Place in bluing reagent (Alkaline solution such as a weak ammonia solution, 0.08% in water) or running tap water until stain is blue (approximately 60 - 120 seconds). Check under microscope for optimal bluing.
- Process slides for Eosin Y working solution for 3-5min
- Dehydration with increasing the grades of Alcohol followed by mounting with DPX.

## STAINING INTERPRETATION

Nuclei stains dark blue to dark violet Cytoplasm along with intercellular substances stains pink to red whereas, Erythrocytes yellow to orange.

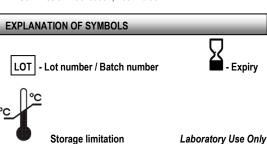
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#### **TROUBLESHOOTING**

Store Eosin Y solution, in its original container at room temperature. For the intensification of the eosin staining, an acidified working solution (using e. g. glacial acetic acid) should be used. The use of a non-acidified solution will result in weakly stained cytoplasm and connective tissue structures; hence it is advisable to follow the specified Reagent preparation protocol to achieve an optimal staining result. For further more questions please contact PathnSitu Technical support at techsuport@pathnsitu.com or 040- 27015544

## **BIBLIOGRAPHY**

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