

## Hematoxylin Staining Solution

### [Product Name]

Hematoxylin Staining Solution

### [Intended Use]

It is mainly used for staining the nucleus.

### [Model & Specification]

| Catalog# | Model  | Description        | Pack Size    |
|----------|--------|--------------------|--------------|
| 4960111  | Harris | Harris Hematoxylin | 500mL/bottle |

### [Principle of Procedure]

The nucleus in the cell has a certain degree of acidity, and it has a strong affinity with the basic stain (hematoxylin), while the cytoplasm is on the contrary, which has a certain degree of basicity and a strong affinity with the acid stain (eosin). After cell smears or tissue sections are subject to hematoxylin-eosin staining, the nucleus will be stained blue-purple by hematoxylin, cytoplasm, muscle fibers, collagen fibers, etc. will be red in varying degrees, and red blood cells will be orange-red.

### [Reagent Provided]

| Product Name                  | Main Compositions  |
|-------------------------------|--|
| Hematoxylin Staining Solution | Hematoxylin, Oxidant, Mordant, Ethanol, Acetic acid and Stabilizer |

### [Storage Conditions and Expiry Date]

Storage at 10°C-30°C, valid for 12 months.

### [Sample Requirement]

Smears and sections must be fully fixed, and paraffin sections must be fully deparaffinized.

### [Materials Required But Not Provided]

Dewaxing Solution, Gradient Ethanol, Eosin Staining Solution, Differentiation Solution, Bluing Back Solution, Mounting Medium.

### [Procedures]

1. Deparaffinize the sections for 5-10 min in xylene I, II and III respectively, and then transfer into 100% and 95% ethanol respectively for 1-3 min each;
2. Immerse in 85% ethanol for 1-3 min and rinse with tap water for rehydration for 1-3 min;
3. Stain in Hematoxylin Staining Solution for 3-5 min, and rinse with tap water for 1-2 min;
4. Differentiate in Differentiation Solution for 1-10 sec; and rinse with tap water for 2min;
5. Bluing with running water for 5-10 min; or bluing with lithium carbonate bluing solution for 1-3 min then rinse with tap water for 1-3 min;
6. Immerse in Eosin Staining Solution (Water-soluble) for 30-60 sec; or dehydrate in 85% ethanol, then stain in Eosin Staining Solution (Alcohol-soluble) for 10-30 sec (Water washing should be avoided);
7. Adjust color for 2 min in 95% ethanol I and II respectively;
8. Dehydrate for 1-3 min through 100% ethanol I and II respectively, and clear in xylene I and II for 1-3 min respectively;
9. Mount with mounting medium and coverslips, observe the result under microscope.

### [Interpretation of Test Results]

Nuclei show blue purple. Cytoplasm, intercellular substance and fibrin show pink to red. And the red cells would show orange red.

#### [Limitations]

Only for staining of cell morphology and histomorphology observation. The staining time and staining quality are affected by temperature, season, operator's experience, sample preparation and section quality.

#### [Precautions]

1. For professional use only;
2. The user shall operate in strict accordance with the instructions; Work clothes, gloves and masks shall be wore when operating, and the operating environment shall be ventilated as possible.
3. After the smear or section is prepared, it shall be fully fixed; paraffin section shall be fully deparaffinized, otherwise it would lead to non-staining or uneven coloring, etc.
4. Avoid storing the Hematoxylin at low temperature, it is easy to precipitate when it is stored at lower than 10°C for a long time. The forming of surface oxide film and some bottom precipitate is normal after a period of use, it would be better to filtrate the solution with qualitative filter paper before use.
5. The Differentiation Solution shall not be used for too long. The smear or section should be washed with clear water immediately when it turn pink.
6. Staining time can be properly shorten in summer or at higher temperature, and it can be properly prolonged in winter or at lower temperature.
7. After staining with Eosin, it should not be washed with ethanol for too long, otherwise it would cause decolorization of eosin.
8. Change the gradient ethanol regularly to ensure the purity.
9. This staining solution is for research use only and it needs to be used within the validity.
10. Dispose of all containers, waste liquid and slides in accordance with national regulations, including unused items and used items.

#### [Basic Information]

##### **Manufacturer and after-sales service unit Name:**

Shenzhen Dakewe Bio-engineering Co., Ltd.

**Website:** <http://www.dakewe.com/>

**Telephone:** (86-755) 86235300

##### **Registration and Production address:**

Room 702-703, Building No.1, Shenzhen Biomedicine Innovations Industrial Park, No.14 Jinhui Road, Kengzi Street, Pingshan District, Shenzhen, China









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**Zip code:** 518122

##### **[Instruction Approval and Revision Date]**

2021.08.03

##### **[Description of Product Symbol]**

| Product Symbol  | Description         | Product Symbol  | Description              |
|---|---------------------|---|--------------------------|
|  | Catalog Number      |  | Product Batch Code       |
|  | Date of Manufacture |  | Storage at 10 °C - 30 °C |
|  | Expiration Date     |  | Manufacturer             |
|  | Product Trademark   |  | Company LOGO             |