# [Product Name]

High Iron Diamine-Alcian Blue (HID-AB) stain kit

# [Catalog No.]

# HS2015

#

# [Specification & Components]

|  |  |  |  |
| --- | --- | --- | --- |
|  **Name** | **Specification** |  |  |
| **25 tests/kit** | **50 tests/kit** | **100 tests/kit** | **250 tests/kit** |
| HID-AB Solution  | 5ml\*1 | 10ml\*1 | 20ml\*1 | 50ml\*1 |
| Ferric Chloride Solution | 0.5ml\*1 | 1ml\*1 | 2ml\*1 | 5ml\*1 |
| Alcian Blue Solution (pH 2.5) | 5ml\*1 | 10ml\*1 | 20ml\*1 | 50ml\*1 |

# Remark: each component of this product can not be used separately, and each component of different batch number can not be used interchangeably.

# [Intended Use]

For Research Use only.

To be used to distinguish between sulfurated acidic mucous substances and salivary acidic mucous substances.

# [Summary and Explanation]

N,N-dimethyl-phenylenediamine dihydrochloride and N,N-dimethyl-pair-phenylenediamine dihydrochloride, both is ammonium salts. They're all positive when they're dissociated. The diammonium salt is combined with sulfurated acidic mucus material to form a complex and the color could be observed. The reaction is slow and Ferric chloride is used in this reaction as catalyst. On the one hand, the oxidation of two ammonium salts forms brown-black cationic chromogen, thus speeding up staining.

On the other hand, the pH of the stain solution decreased by 1.4. At this pH value, the carboxyl group on the section could not combine with the diammonium salt, but only the sulfate group reacted with the diammonium salt to form a complex of purple-brown to brown-black. Subsequently, Alicin blue (pH 2.5) stains the carboxylated sialic acid mucus as blue so that the acidic mucus of the two main groups is shown separately..

# [Storage and Validity]

Store at 2~8℃. Avoid freezing. Valid for 12 months.

The validity period can be in the temperature range of -20°C-2°C or 8°C-30°C within 7 days for short delivery. It is recommended to use the opened reagents within the validity period within 6 months after opening. The bottle cap should be tightened in time afer each use to avoid volatilization or deterioration.

# [Specimen Requirements]

The tissue sample was fully fixed and dewaxed.

# [Test Method]

# 1. To make routine dewaxing and hydration of sections, and then rinse with distilled water once more,

# 2. HID-AB solution and Ferric Chloride Solution were mixed in a volume ratio of 50:1.5, and added to the tissues, reacting at room temperature for 18-24 hours;

# 3. Wash with distilled water;

# 4. To be stained with Alcian blue solution (pH 2.5) for 10-20min;

# 5. To be rinsed with distilled water (if necessary, counterstain with fast red solution);

# 6. Routing dewaxing, making transparent, neutral gum sealing, microscope diagnosis

# [Results Interpretation]

After staining, sulphate acid slime material is stained from purplish brown to brown black. The carboxylated acidic mucus substances are showed blue. The cell nucleus is not stained.

# [Test Limitations]

It is limited to staining and observation of pathological tissue contents.

# [Cautions]

1. Before start the experiment, read the instructions carefully. Please use the reagents during the validity period and pay attention to personal protection.

2. The working solution is prepared before adjacent use, and should be discarded after one use. If it is kept in the refrigerator after use, it can be reused 1-2 times, but the background may be slightly tinted, affecting the specificity.

3. Take the kit out to room temperature half an hour before use, and put it back in the refrigerator after use.

4. HID-AB solution is toxic, avoid contact with skin during operation.

5. This reagent should be used by professionals and interpreted.

6. Do not inhale the reagent by mouth. Avoid contact with skin and mucous membranes. If the reagent comes into contact with the sensitive site, rinse with plenty of water.

7. Waste should be disposed of according to the requirements of hospital or environmental protection department.

# [Symbols]

The following symbols may be found in this IFU or on the product labeling. Some glossary symbols may not be applicable to this product.

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| **Symbol** | **Used for** | **Symbol** | **Used for** |
|  | Expiration Date |  | Consult instructions for use |
|  | Lot Number |  | *For Research Use Only.* |
|  | Storage Temperature |  | Manufacturer |
|  | Catalogue number | 76f44884f1091181972e6e93ee53469a | Date of manufacture |
|  | CE mark | A black and white rectangular sign with letters  Description automatically generated | Authorized representative in the European Community |

# [Version]

Revision date: 2024-01-02

Version: 01; Change Summary: new