



# **N-Histofine<sup>®</sup>** **DAB-3S kit**

Peroxidase Chromogen/Substrate kit

**NICHIREI BIOSCIENCES INC.**

6-19-20, Tsukiji, Chuo-ku, Tokyo, 104-8402, JAPAN

Phone: 81-3-3248-2207 Facsimile: 81-3-3248-2243

**Reagent supplied : 500 tests**  
**1500 tests**

**Code : 415192F**

**Code : 415194F**

## **3,3'-DIAMINOBENZIDINE TETRAHYDROCHLORIDE (DAB) SUBSTRATE KIT**

### **SUBSTRATE FOR HORSERADISH PEROXIDASE**

#### **FORM**

Liquid.

This product contains the following reagents;

|  | [500 tests]        | [1500 tests]   |
|--|--------------------|----------------|
| Reagent A : DAB solution concentrate               | ... 3mL × 1 bottle | 9mL × 1 bottle |
| Reagent B : Enhancer solution concentrate          | ... 3mL × 1 bottle | 9mL × 1 bottle |
| Reagent C : Hydrogen peroxide solution concentrate | ... 3mL × 1 bottle | 9mL × 1 bottle |
| Dropping bottle                                    | ... 1 bottle       | 1 bottle       |

#### **PREPARATION of Chromogen/Substrate solution**

1. Add 1 drop of DAB solution concentrate (Reagent A) to 1 mL of distilled water into the tube. Mix well.
2. Add 1 drop of Enhancer solution concentrate (Reagent B) to 1 mL of diluted Reagent A solution. Mix again.
3. Add 1 drop of Hydrogen peroxide solution concentrate (Reagent C) to 1 mL of diluted Reagent A and Reagent B solution. Mix again.
4. The final mixture is stable for 14 days at 2-8°C with light shielding\*.

\*: Though the final mixture is stable for 14 days at 2-8 °C with light shielding, the mixture may result in a precipitate with time. The precipitation will have no effect on staining. However, in some cases, some precipitation attached on slides or tissues, may disturb getting crisp image. To avoid such precipitation attachment, following procedures are recommended.

1. Use supernatant of the mixture
2. Rinse the slides in PBS containing 0.1% Tween 20 or TBS containing Tween 20 at room temperature for three minutes, in twice, before and after the step of the mixture reaction described in USAGE.

Note regarding Dropping bottle

- 1) The dropping bottle may be suitable for dropping the final mixture on the slides, not for mixing the reagents, nor for storage of the final mixture.
- 2) If the final mixture is moved from the tube to the dropping bottle, careful handling (e.g. using pipette) is required.
- 3) If the remaining final mixture is stored, it shall be moved from the dropping bottle to appropriate vessels (e.g. sealed bottles or tubes) and stored at 2-8 °C with light shielding.
- 4) Rinse the dropping bottle thoroughly with distilled water after use and dry it enough prior to reuse.

#### **USAGE**

This substrate will produce a brown colored deposit upon reaction with peroxidase.

For color development, incubate the tissue section, which has been reacted with peroxidase conjugate, with 1-2 drops of the final mixture at room temperature for 5-20 minutes. Color development may be monitored with a microscope. After adequate coloration, wash the slide with tap water.

Note regarding the final mixture : Use the final mixture after adjusting to room temperature.

This brown deposit is insoluble in organic solvent. Therefore, the slide can be mounted with permanent mounting media after washing with water, dehydrated in graded series of alcohol and cleared in xylene.

#### **STORAGE**

Store at 2-8°C.

#### **REMARKS**

For research use only. Not for diagnostic use.

#### **WARNING !**

1. Reagent A (DAB solution concentrate) should be handled with care for it contains carcinogen.
2. Reagent C (Hydrogen peroxide solution concentrate) should be handled with care for it contains Hydrogen peroxide.