



## **Product Information Sheet**

# Alkaline Phosphatase Conjugated Rabbit IgG SABC Kit

Catalog No. SA1052

Size 1 kit

## **Product Type**

Ready to use (No dilution needed)

#### Storage

4°C for one year. Avoid freezing.

### **Tested Applications**

Immunohistochemical analysis of paraffin-embedded sections, IHC(P); Immunohistochemical analysis of frozen-embedded sections, IHC(F); Immunocytochemistry, IC.

## Introduction

SABC (StreptAvidin-Biotin Complex) is specially designed for displaying the distribution of antigens in tissues and cells in immunochemistry and other immunodetection analyses. Streptavidin is a 47,000 dalton protein purified from the bacterium *Streptomyces avidinii*. Streptavidin has extraordinarily strong affinity to biotin molecules. The dissociation constant ( $K_d$ ) of the biotin-streptavidin complex is on the order of ~10<sup>-15</sup> mol/L, a million times higher than the typical affinity between antigens and their antibodies. Streptavidin has very low non-specific binding to tissues and cells, due to its nearly neutral isoelectric point (IP=6.0~6.5). Therefore, immunohistochemical analyses based on streptavidin-biotin complex has extremely low background. Furthermore, this kit has high sensitivity because each complex it generates has a large number of alkaline phosphatase and streptavidin molecules. In brief, SABC offers high specificity, low background and ease-of-use.

#### Kit Components

- 1. 5% BSA Blocking Reagent: 12 ml, for blocking tissue sections.
- Biotinylated Secondary Antibody (Goat Anti-rabbit IgG): 12ml (10μg/ml). Affinity purified antibody, labeled with "long-arm" biotin (Biotinamidohexanoic acid N-hydroxysuccinimide ester, CAS# 72040-63-2).
- 3. SABC-AP (Alkaline Phosphatase conjugated streptavidin): 12ml (20µg/ml). Manufactured by A proprietary method, the complex is very stable and offers superior amplification of the antigen signals.
- 4. BCIP/NBT Chromogenic agent (20x): 1ml.
- 5. Water soluble sealing reagent: 12 ml.
- 6. Neutral nuclear fast red: 12 ml.

### Material Required But Not Provided

- 1. APES or POLY-L-LYSINE.
- 2. 0.01M TBS (pH 7.2~7.4): 9g sodium chloride, 1.2g Tris, and 450µl acetic acid in 1000ml of distilled water.
- 3. 0.01M TBS (pH 9.0~9.5): 9g sodium chloride and 1.2g Tris in 1000ml of distilled water.
- 0.01M Citrate Buffer: 3g sodium citrate dihydrate (C<sub>6</sub>H<sub>5</sub>Na<sub>3</sub>O<sub>7</sub>·2H<sub>2</sub>O) and
  0.4g citric acid monohydrate (C<sub>6</sub>H<sub>8</sub>O<sub>7</sub>·H<sub>2</sub>O) in 1000ml of distilled water.
- 0.1% trypsinase or the compound digest solution (Catalog number: AR0022).

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## Note

Rabbit IgG refers to the animal origin of the primary antibody, not the origin of the specimen. This kit must be used on primary antibodies from rabbit.