



Product Information Sheet

Peroxidase Conjugated Human IgG SABC Kit

Catalog No. SA1024

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 $\sim 10^{-15}$ 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 peroxidase and streptavidin molecules. In brief, SABC offers high specificity, low background and ease-of-use.

Kit Components

1. Normal rabbit serum blocking reagent: 12 ml, for the block of tissue sections.
2. Biotinylated Secondary Antibody (Rabbit Anti-human IgG): 12ml (10 μ g/ml). Affinity purified antibody, labeled with "long-arm" biotin (Biotinamidohexanoic acid N-hydroxysuccinimide ester, CAS# 72040-63-2).
3. SABC-POD (Peroxidase conjugated streptavidin): 12ml (20 μ g/ml). Manufactured by a proprietary method, the complex is very stable and offers superior amplification of the antigen signals.

Material Required But Not Provided

1. APES or POLY-L-LYSINE.
2. 0.02M PBS (pH 7.2–7.6): 8.5g sodium chloride, 2.8g anhydrous Na_2HPO_4 and 0.4g anhydrous NaH_2PO_4 in 1000ml of distilled water. (The weight should be adjusted accordingly if hydrous phosphates are used.)
3. 0.01 M Citrate Buffer: 3g sodium citrate dihydrate ($\text{C}_6\text{H}_5\text{Na}_3\text{O}_7 \cdot 2\text{H}_2\text{O}$) and 0.4g citric acid monohydrate ($\text{C}_6\text{H}_8\text{O}_7 \cdot \text{H}_2\text{O}$) in 1000ml of distilled water.
4. DAB Chromogenic Kit (Catalog number: AR1022 or AR1025).
5. 0.1% trypsinase or the compound digest solution (Catalog number: AR0022).

To reorder contact us at:

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Note

Human 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 human.