

Rabbit SABC Staining Kit | SABC staining kit

SABC kit (rabbit)

CATALOG #
AAA249420

REACTIVITY
Rabbit

PRODUCT SYNONYMS

SABC; SABC kit (rabbit); SABC staining kit

PRODUCT SPECIFICATIONS

Reactivity

Rabbit

ADDITIONAL INFORMATION

Related Product Information for SABC staining kit

Background: Streptavidin is a 60,000 molecular weight with an extraordinarily high affinity for the small molecular weight vitamin, biotin. Because this affinity is over one million times higher than that of antibody for most antigens, the binding of Streptavidin to biotin (unlike antibody-antigen interactions) is essentially irreversible. In addition to this high affinity, the Biotin/ Streptavidin System can be effectively exploited because Streptavidin has four binding sites for biotin and most proteins (including antibodies and enzymes) can be conjugated with several molecules of biotin. These aspects provide the potential for macromolecular complexes to be formed between Streptavidin and biotinylated enzymes. An immunoperoxidase procedure based on these properties was devised for localizing a variety of histologically significant antigens and other markers. (Hsu SM, Raine L, Fanger H: Am. J. Clin. Pathol. 75, 734-738, 1981; Hsu SM, Raine L, Fanger H: J. Histochem. Cytochem. 29, 577-580, 1981.) This technique employs unlabeled primary antibody, followed by biotinylated secondary antibody and then a preformed Avidin and Biotinylated horseradish peroxidase macromolecular Complex. The SABC kit contains Streptavidin and biotinylated horseradish peroxidase reagents, which have been specially prepared to form ideal complexes for immunoperoxidase staining. Although the structure of the Streptavidin: biotinylated horseradish peroxidase complex is still undefined, evidence suggests that it consists of many biotinylated horseradish peroxidase molecules crosslinked by Streptavidin into a three dimensional array. The complex apparently has few exposed biotin residues but retains at least one biotin binding site. Formation of the complex is achieved by mixing Streptavidin and biotinylated horseradish peroxidase in dilute solution and in defined amounts prior to use. After the initial incubation there appears to be little change in the complex as judged by only a marginal increase in immune peroxidase staining sensitivity and the complex remains stable for several hours after formation. The high sensitivity and shorter incubation times reported for the SABC system are likely due to the number of active horseradish peroxidase molecules associated with the complex and the rapid, irreversible interaction of the complex with biotinylated antibody. The low background staining obtainable with the SABC Kits is probably due to the high dilutions of primary antisera and other reagents employed in the method, the quality of our affinitypurified biotinylated secondary antibodies, and the specially prepared Streptavidin and biotinylated horseradish peroxidase.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/rabbit-staining-kits/sabc/249420>