# *Peroxidase*-Labeled Streptavidin for Immunohistochemistry

 Catalog No.
 Size

 71-00-38
 50 mL

# DESCRIPTION

Streptavidin is a 60,000 dalton protein isolated from the bacterium *Streptomyces avidinii* and binds four molecules of biotin with high affinity ( $K_d = 10^{-15} \text{ M}^{-1}$ ). Streptavidin is covalently linked with peroxidase by a modification of the periodate method of Nakane and Kawaoi<sup>1</sup>.

# CONTENT

Product is provided as a liquid at use dilution (approximately 2  $\mu$ g/mL).

# STABILIZERS AND PRESERVATIVES

Bovine serum albumin added as protein stabilizer. A proprietary biological preservative is added. DO NOT USE SODIUM AZIDE. Non-sterile. Stable for a minimum of 1 year when stored at  $2 - 8^{\circ}$ C.

#### **E/P RATIO**

Molar enzyme/streptavidin protein ratio = 2.5:1.

# SUGGESTIONS FOR USE

Peroxidase-labeled Streptavidin is provided at an optimal working concentration for use with KPL biotin-labeled secondary antibodies in immunohistological applications. Following incubation of the specimen with primary and biotin-labeled secondary antibody, flood the slide with Peroxidase-labeled Streptavidin and incubate for 30 minutes at room temperature. After incubation, rinse the slide with wash buffer and soak slide in wash buffer for five minutes before applying a peroxidase substrate for immunohistochemistry.

### UNIVERSAL KIT REAGENTS

Peroxidase-labeled Streptavidin is a component of the HistoMark<sup>®</sup> Universal Streptavidin Kits for use with:

Mouse Primary Antibodies:	Catalog No. 71-00-18
Rabbit Primary Antibodies:	Catalog No. 71-00-19
Rat Primary Antibodies:	Catalog No. 71-00-20
Goat Primary Antibodies:	Catalog No. 71-00-26



#### SUBSTRATES

KPL offers the following peroxidase substrates for immunohistochemistry:

TrueBlue Substrate:	Catalog No. 50-78-02
HistoMark BLACK:	Catalog No. 54-7s-00
HistoMark ORANGE:	Catalog No. 54-74-00
DAB Reagent Set:	Catalog No. 54-10-00

## PRODUCT SAFETY AND HANDLING

Horseradish peroxidase is inactivated in the presence of hydrogen peroxide by reacting irreversibly with certain pollutants common in laboratory water supplies. If this product fails to perform as expected, check water supply for enzyme inactivation.

#### **REFERENCES:**

 Nakane, P.K., and Kawaoi, A., J. Histochem. Cytochem. 22 (1974) 1084.

# **PRODUCT SAFETY AND HANDLING:**

This product is considered non-hazardous as defined by The Hazard Communication Standard (29 CFR 1910.1200). Avoid contact with skin and eyes. In case of contact or spillage, clean with copious amounts of water. Disposal via sanitary sewer.

See the KPL catalog for a wide selection of antibodies, substrates, protein and nucleic acid detection kits, and immunohistochemistry reagents.

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