

# Technical Data Sheet



## Streptavidin Conjugated Horseradish Peroxidase

### General Information

**Product Name:** Streptavidin Conjugated Horseradish Peroxidase, Streptavidin-HRP, SA-HRP

**Catalog Number:** A16

**Formulation:** 1mg/ml SA-HRP, 10mM PB, 50% Glycerol, pH7.4; Lyophilized in 10mM PB Buffer (8mM Na<sub>2</sub>HPO<sub>4</sub>, 2mM NaH<sub>2</sub>PO<sub>4</sub>, pH7.4)

*Product is stable for up to three years from date of receipt at -20°C to -80°C.*

*It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.*

### Description

Streptavidin conjugated horseradish peroxidase (HRP streptavidin, streptavidin HRP, sa-hrp, hrp-sa, etc.) is a kind of high-purity streptavidin (SA) cross-linked with high-purity horseradish peroxidase and purified. It can be used to detect biotinylated antibody, protein, tissue, cell, nucleic acid and other samples. It is often used as a signal amplifier to improve the detection sensitivity.

Streptavidin (SA) is a tetramer protein formed by four identical subunits, with a molecular weight of about 60kDa, which can bind to biotin with high specificity, and one SA can bind to four biotin. Compared with avidin from egg white, SA has no glycosylation and its isoelectric point is neutral or slightly acidic, so its non-specific binding is much lower than avidin, and its non-specific background is very low when it is used for detection.

Horseradish peroxidase (HRP) is a kind of glycoprotein containing heme. Its molecular weight is about 40 kDa, sugar content is 18%, brown. It can be incubated with substrate to produce a kind of molecular derivative labeled by coloring, fluorescence or luminescence. This phenomenon makes it widely used in the detection of molecular biology, bi°Chemistry, immunology and other fields.

The following table is the recommended dilution ratio for conventional use. In the actual test operation, the dilution ratio of sa-hrp can be adjusted appropriately according to the specific experimental conditions. Taking the conventional Western bolt as an example, 10 ml of 1:2000 diluent is needed for each test, and only 5  $\mu$ l (5  $\mu$ g) is needed for each test.

WB	ELISA	IHC/IC	Southern/Northern	EMSA
2,000~10,000	2,000~10,000	200~500	2,000~5,000	2,000~5,000

WB: Western bolt; IHC: Immunochisto chemistry; IC: Immunocyt Chemistry

*Research use only or for further manufacturing*