



Product Name: Streptavidin;HRP conjugated (SA-HRP) , Horseradish peroxidase labeled Streptavidin

Product Number: SGJH013

Package: 100μL or 1mL

Product Introduction:

This horseradish peroxidase-labeled Streptavidin (HRP-labeled Streptavidin) is also called HRP-Streptavidin, Streptavidin-HRP or horseradish peroxidase

Specific uses include Western, ELISA, immunohistochemistry or immunocytochemistry, in situ hybridization, Southern, Northern, EMSA, etc. This HRP-Streptavidin is made by cross-linking high-purity Streptavidin and ultra-pure horseradish peroxidase to ensure the lowest background and highest sensitivity.

The concentration is 1 mg/ml. The molecular weight of Streptavidin is 66kD, and it can bind to biotin with high specificity. The affinity constant of Streptavidin and biotin is $K_d=10^{-15}$ M. Streptavidin is a 4-mer protein that can bind to 4 biotin molecules at the same time. It is purified from chicken egg white and has a high degree of similarity to Avidin in terms of spatial structure and affinity with biotin. Streptavidin is a non-glycosylated protein and is essentially uncharged. Avidin has a pI of ~10.5 and is alkaline at neutral pH.

Compared with the neutral condition, Streptavidin has no charge, so the non-specific binding of Streptavidin is much lower than that of Avidin, so the non-specific background of the detection is much lower.

Streptavidin is currently used instead of Avidin in biotin detection.

Horseradish peroxidase (HRP) can catalyze ECL reagents and produce chemiluminescence, which can catalyze TMB to produce blue in ELISA, and can also be used in immunohistochemistry, immunocytochemistry or Western blot detection.

When catalyzed by DAB, a brown precipitate was produced.

The recommended dilution ratio of horseradish peroxidase-labeled streptavidin for various common uses is shown in the table below. The actual experimental operation should be adjusted according to the specific situation.

Dilution ratio of horseradish peroxidase-labeled streptavidin. For Western, the recommended dilution range is 1:2000-10000.

WB	IHC/IC/ISH	ELISA	Southern/Northern	EMSA
1:2000-10000	1:200-500	1:2000-10000	1:2000-5000	1:2000-5000

Storage Conditions: Store at -20°C, valid for one year.

Instructions for use:

For Western, ELISA, immunohistochemistry or immunocytochemistry, in situ hybridization, Southern, Northern, EMSA, etc., please refer to the relevant experimental steps.

Starting dilution of the concentration should be diluted according to the dilution ratio recommended in the product introduction.