



Streptavidin peroxidase conjugate

857-0005 Streptavidin-HRP 0.5ml (streptavidin content 1mg/ml)

Release 001 December 2006

Technical bulletin 2466

Introduction

Streptavidin is a tetrameric protein purified from *Streptomyces avidinii* that binds very tightly to the vitamin biotin. Peroxidase conjugated streptavidin is typically used for the detection of biotin conjugated proteins in immunoassays.

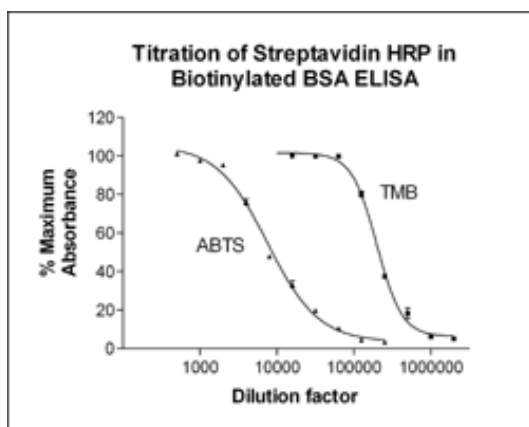
Streptavidin-HRP is prepared by conjugating purified streptavidin to highly active HRP enzyme. The conjugate has been optimized for enhanced performance using Innova's Lightning-Link conjugation technology¹.

QC specification

Detection of BSA-biotin by ELISA:

A 1/10,000 dilution of conjugate gives an OD of >1.0 after 10min incubation at 22°C with ABTS substrate.

A 1/100,000 dilution of conjugate gives an OD of >1.0 after 10min incubation at 22°C with TMB substrate.



Storage of streptavidin-HRP

The conjugate is shipped at ambient temperature and should be stored at 4°C. For very long-term

storage small aliquots may be stored at -70°C, but avoid repeated cycles of freeze-thaw.

Diluents

The conjugate may be diluted in any of the buffers commonly used in immunochemical procedures, typically either TBS or PBS pH 7.4 with 0.1% BSA. Tween 20 (0.05%) is sometimes used instead of BSA, or in addition to BSA. In most cases excellent results will be obtained with a simple buffer plus BSA combination.

Notes

1. Lightning-Link™ is a proprietary conjugation system that permits a level of optimization of secondary reagents that is not feasible using standard conjugation methods.

FAQ

What dilution should I use?

This will depend on your particular application and on the HRP substrate that is employed. Popular HRP substrates include TMB, OPD and ABTS but the sensitivities vary over an order of magnitude (see figure in left panel). For any new application try serial dilutions of conjugate and use the dilution that gives the highest signal to noise ratio with your preferred substrate.

Related Products

#850 - 0005 Protein A - HRP

For further information and related detection reagents see www.innovabiosciences.com