



## Goat anti-Rabbit, Horseradish peroxidase conjugate

851-0005    Goat anti-rabbit HRP    0.5ml    (Ab content 1mg/ml)

Release 001 November 2006

Technical bulletin 2417

### Introduction

Anti-rabbit HRP conjugates are widely used in immunochemical procedures such as ELISA, western blotting, and immunocytochemistry.

The goat antiserum used in the preparation of 851-0005 is purified on rabbit-IgG agarose to isolate the specific antibody fraction that recognizes rabbit IgG. HRP conjugate is prepared by conjugating the affinity purified Goat-anti-rabbit IgG antibody to pure HRP enzyme of very high specific activity. The conjugate has been optimized for superior performance using Innova's Lightning-Link conjugation technology<sup>1</sup>.

### Storage of conjugate

The conjugate is shipped at ambient temperature in a glycerol-based formulation and can be stored at 4°C, or at -20°C without freezing.

### QC specification

ELISA is performed using rabbit IgG-coated plates. Conjugates are serially diluted in TBS/0.1% BSA and 50µl aliquots are added to wells. After incubation for 1 hour at 22°C the plate is washed with TBS five times. HRP activity is measured with both ABTS and TMB substrates.

### ABTS substrate

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

### TMB substrate

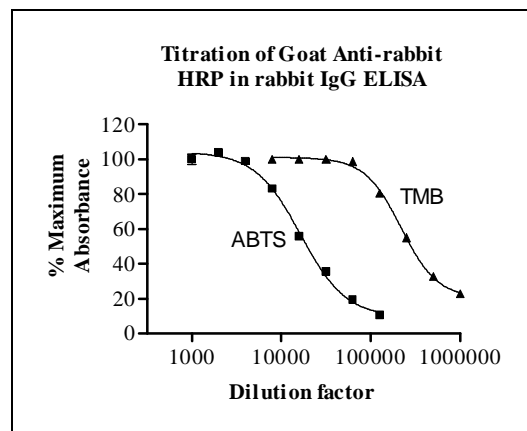
A 1/100,000 dilution of Goat anti-rabbit IgG/HRP conjugate gives an OD of >1.0 after 10min incubation at 22°C with TMB substrate.

### 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*, with TMB approximately 12x more sensitive than ABTS. OPD shows an intermediate level of sensitivity. For any new application try serial dilutions of the conjugate and use the dilution that gives the highest signal to noise ratio.

Figure 1. QC data for rabbit IgG ELISA



### Notes

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

Other detection reagents prepared with Lightning-Link<sup>TM</sup> technology may be found at [www.innovabiosciences.com](http://www.innovabiosciences.com).