



## LifeXtend™ HRP Conjugate Stabilizer/Diluent

901-0005 50ml stabilizer/diluent

Release 001 March 2008

Technical bulletin 2715

### Introduction

The performance of HRP conjugates diminishes over time. There are a number of factors that contribute to loss of performance including (i) inactivation of HRP, (ii) instability of the bond which links HRP to the antibody, (iii) microbial attack and (iv) denaturation of the antibody. Loss of performance accelerates with increasing temperature and with increasing dilution of conjugate. For these reasons HRP conjugates are often kept in a concentrated form at 4°C.

LifeXtend™ conjugate stabilizer/diluent is a proprietary multi-component reagent system that protects antibody-HRP conjugates from all of the negative factors noted above, thus ensuring the best possible performance in experiments performed at room temperature. Moreover, the ability to store HRP conjugates at working concentration eliminates waste and improves consistency from experiment to experiment.

In addition to its proprietary enzyme stabilizers, LifeXtend™ contains antimicrobial agents as well as blockers to enhance signal to background in immunoassay applications.

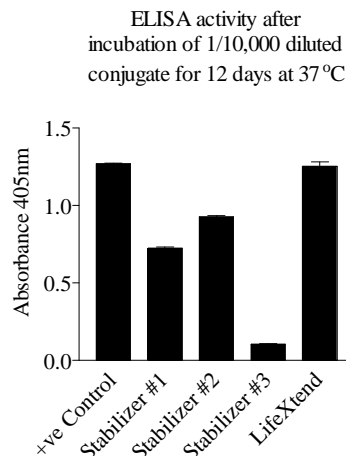
### Storage of LifeXtend™

LifeXtend™ HRP conjugate stabilizer/diluent is shipped at ambient temperature and should be stored at 4°C.

### Comparison with other well known brands of stabilizer (Fig 1)

HRP conjugated goat anti-rabbit IgG (1mg/ml) was diluted 1/10,000 in each of four stabilizers and incubated for 12 days at 37°C. An undiluted control sample was incubated at 4°C for the same period and diluted 1/10,000 prior to ELISA testing. Conjugates were incubated on a rabbit IgG-coated plate for 1 hour at room temperature, followed by washing and determination of HRP activity using ABTS substrate.

Figure 1. Stability of HRP conjugates



As can be seen above, even some of the best known stabilizers perform either poorly or only modestly in standard accelerated stability trials at 37°C. LifeXtend™ HRP stabilizer/diluent affords the greatest protection and can substantially extend the shelf life of HRP conjugates stored at 4°C or at room temperature.

### Related product

Lightning-Link™ HRP conjugation kits – the world's easiest conjugation system, requiring just thirty seconds hands-on time to set up antibody conjugation reactions.

701-0000 LL-HRP conjugation kit, 3 reactions, each up to 400ug of Ab

701-0002 LL-HRP conjugation kit, 1 reaction up to 4mg of Ab

Other pack sizes also available.

For further information on Innova's products see [www.innovabiosciences.com](http://www.innovabiosciences.com)