

# 18995 BioStab Peroxidase Conjugate Stabilizer

Horseradish peroxidase (HRP) is an enzyme commonly used for immunodetection.

#### **Product Description:**

BioStab Peroxidase Conjugate Stabilizer dramatically extends the life of HRP conjugates, allowing much more consistent results over extended periods of time compared to daily prepared dilutions. The mode of action of BioStab HRP Stabilizer comprises both stabilization of the antibody and stabilization of the enzymatically active centre of HRP. E.g., after 4 weeks at 37 ° C at a ready-to use concentration of 100 ng/ml residual activity

comprises more than 97 % of the initial enzyme activity as well as the antibody binding properties. Compared to immediately made dilutions in an unspecific dilution buffer, 10 to up to 30 % higher activities are observed in

BioStab HRP Stabilizer, indicating a stabilization of the solution compared to inhibition of the enzyme in normal buffers. BioStab Peroxidase Conjugate Stabilizer has only minimal effects on the enzymatic reaction. Thus HRP conjugates can be used at ready-touse concentrations in BioStab Peroxidase Conjugate Stabilizer for a minimum of 6 months at room temperature or 1 year at 4°C.

BioStab Peroxidase Conjugate Stabilizer can be used in ELISA, Western Blotting, Immunohisto-chemistry and any other applications which require HRP conjugates. This stabilizer contains a minimum amount of a surfactant. The stabilizer is free of any protein to minimize potential unspecific interactions. BioStab Peroxidase Conjugate Stabilizer can be used to dilute the conjugate to ready-to-use concentrations (below 20 ng/ml).

#### **Directions:**

A procedure for standard assays reducing loss of conjugates and ensuring assay-to-assay-reproducibility.

#### Storage of working solutions:

Dilute an amount of conjugate needed for the next period (of up to one year) to the desired concentration (e. g., 1:50,000 for ELISA). Add a specific blocking agent. Keep the solution refrigerated until use, then warm up the amount required, pipet directly into the wells in use and perform your assay. The dilution should best be stored refrigerated.

#### Storage of stock solutions:

The concentrated conjugate solution should be diluted to a concentration appropriate to perform titration or other dilution experiments (e. g., 1/1000). This stock can be stored for the indicated time without loss of activity.

Further dilution can be performed using appropriate additives. Avoid phosphate buffers at concentrations higher than 3 mM. Diluted solution should be used immediately. No warranty can be given on the stabilization of diluted stabilizer solutions.



## Stabilization of HRP Conjugate at 37 °C

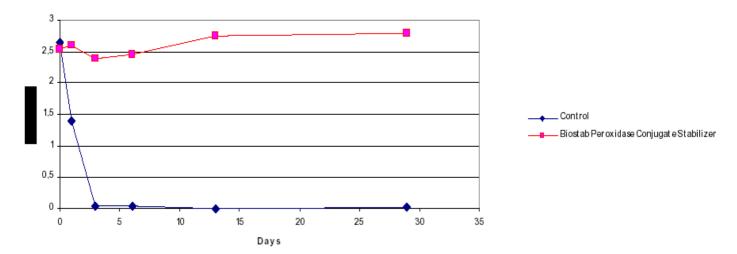


Fig.: Effect of BioStab Peroxidase Conjugate Stabilizer on the ELISA reaction of a commercial preparation of a HRP-antibody conjugate. The conjugate is diluted 1:10,000 in the stabilizer, activity is represented as optical density achieved in a direct ELISA

### **Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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