

Pierce[®] Peroxidase Conjugate Stabilizer

31503

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Number	Description
31503	Pierce Peroxidase Conjugate Stabilizer , 25mL, a buffered preparation of highly purified ethylene glycol, preservative, and proprietary enzyme and protein stabilizers

Storage: Upon receipt store at 4°C. Product is shipped at ambient temperature.

Introduction

The Thermo Scientific Pierce Peroxidase Conjugate Stabilizer is a cryoprotectant for extended duration, liquid storage of active peroxidase-conjugated proteins at -20°C. With this stabilizer, single liquid stock solutions are functional for many months and repeatedly sampled for use without compromising their stability by repeated thawing and re-freezing.

Degradation of enzyme activity can occur from contaminants that exist in reagents like glycerol; however, the Pierce Stabilizer contains highly purified ethylene glycol, which ensures that conjugates remain active and as a liquid during freezer storage. The stabilizer also contains a peroxidase-compatible preservative and proprietary enzyme and protein stabilizers that ensure retention of functional peroxidase-conjugated antibodies and other proteins.

Important Product Information

- The Pierce Stabilizer is for storing samples at -20°C. The stabilizer will not prevent a sample from becoming frozen at -80°C, and its effectiveness as a stabilizer in such conditions has not been determined.
- The Pierce Stabilizer is designed for stock solutions at concentrations > 0.1mg/mL. For stabilization and storage of more dilute solutions (i.e., 1ng/mL) use Thermo Scientific Guardian Peroxidase Conjugate Stabilizer/Diluent (see the Related Thermo Scientific Products Section).
- Although the Pierce Stabilizer might be effective for enzyme conjugates other than with peroxidase, these have not been tested. Do not use this product for alkaline phosphatase conjugates. For general protein stabilization and storage, consider using highly purified Ethylene Glycol (Product No. 29810).

Procedure

1. Warm the Pierce Peroxidase Conjugate Stabilizer to room temperature and vortex to ensure that the contents are dissolved. Some crystals may be visible in the product at 4°C; however, this will not affect product performance.
2. Add and mix 2mL of the stabilizer with 1mL of peroxidase conjugate solution. Phosphate-buffered saline (PBS) is an ideal buffer for peroxidase conjugates; however, many other buffer systems are compatible.

Note: Do not use less than a 1:1 ratio of the stabilizer and conjugate, as this will result in insufficient cryoprotection. Alternatively, any ratios greater than 2:1 may be used as long as the final conjugate concentration remains greater than 0.1mg/mL.

Note: Lyophilized peroxidase conjugates may be reconstituted by directly substituting the Pierce Stabilizer for the water volume required.

3. Store the stabilized conjugate solution at -20°C.

Additional Information

A. For additional information about protein stability and storage, visit the Technical Resources section of our web site for Tech Tip #43: Protein stability and storage.

B. Example data demonstrating the stabilizing effect of the Pierce Peroxidase Conjugate Stabilizer

The Pierce Peroxidase Conjugate Stabilizer effectively preserves peroxidase activity for several months (Figure 1). In this experiment, a peroxidase-conjugated antibody sample was stored in Pierce Stabilizer or Tris-buffered saline (TBS) at -20°C. Every two weeks the stocks were cycled several times between room temperature and -20°C and tested for peroxidase activity using Thermo Scientific 1-Step Turbo TMB ELISA Substrate (Product No. 34022). The TBS stock lost 50% activity within eight weeks, but the Pierce Stabilizer stock remained nearly fully active for the duration of the 16 week experiment. Conjugate stock solutions made with the Pierce Stabilizer do not require warming to room temperature before use; consequently, stability will be typically greater than that demonstrated in this experiment.

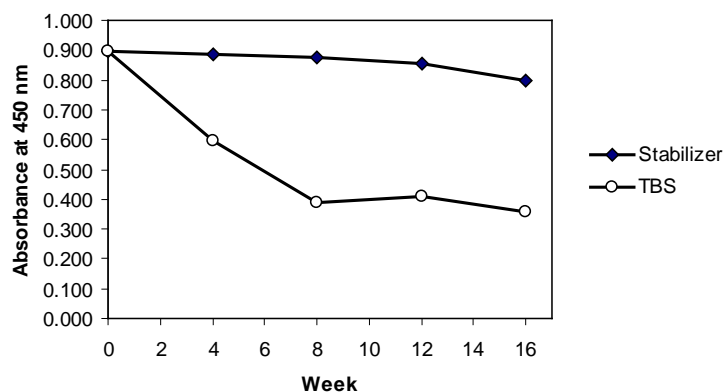


Figure 1. Peroxidase-conjugate activity in the stabilizer and Tris-buffered saline (TBS).

Related Thermo Scientific Products

28372	BupH™ Phosphate Buffered Saline Packs, 40 packs
29810	Ethylene Glycol (50% aqueous solution), 200mL
37548	Guardian™ Peroxidase Conjugate Stabilizer/Diluent, 200mL
37552	Guardian Peroxidase Conjugate Stabilizer/Diluent, 1L
78410	Protease Inhibitor Cocktail Kit, 2mL
78415	Protease Inhibitor Cocktail, EDTA free, 1mL
36978	PMSF Protease Inhibitor (phenylmethylsulfonyl fluoride), 5mg

This product ("Product") is warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Product documentation, specifications and/or accompanying package inserts ("Documentation") and to be free from defects in material and workmanship. Unless otherwise expressly authorized in writing, Products are supplied for research use only. No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the original purchaser of the Product ("Buyer").

No other warranties, express or implied, are granted, including without limitation, implied warranties of merchantability, fitness for any particular purpose, or non infringement. Buyer's exclusive remedy for non-conforming Products during the warranty period is limited to replacement of or refund for the non-conforming Product(s).

There is no obligation to replace Products as the result of (i) accident, disaster or event of force majeure, (ii) misuse, fault or negligence of or by Buyer, (iii) use of the Products in a manner for which they were not designed, or (iv) improper storage and handling of the Products.

Current product instructions are available at www.thermoscientific.com/pierce. For a faxed copy, call 800-874-3723 or contact your local distributor.

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