

# Protein-Free Blocking Buffers

37570 37571 37572 37573

1783.0

Number	Description
37570	<b>Protein-Free (TBS) Blocking Buffer</b> , 1L, contains a proprietary compound in Tris-buffered saline, pH 7.4 with Kathon <sup>®</sup> Antimicrobial Agent
37571	<b>Protein-Free T20 (TBS) Blocking Buffer</b> , 1L, contains a proprietary compound in Tris-buffered saline, pH 7.4 with 0.05% Tween <sup>®</sup> -20 and Kathon <sup>®</sup> Antimicrobial Agent
37572	<b>Protein-Free (PBS) Blocking Buffer</b> , 1L, contains a proprietary compound in phosphate-buffered saline, pH 7.4 with Kathon <sup>®</sup> Antimicrobial Agent
37573	<b>Protein-Free T20 (PBS) Blocking Buffer</b> , 1L, contains a proprietary compound in phosphate-buffered saline, pH 7.4 with 0.05% Tween <sup>®</sup> -20 and Kathon <sup>®</sup> Antimicrobial Agent

**Storage:** Upon receipt store product at room temperature. After opening, store product at 4°C.

## Introduction

Protein-Free Blocking Buffers contain a proprietary compound for blocking excess binding sites in ELISA, Western blotting, arrays and other immunochemical applications. This blocking buffer reduces or eliminates many of the problems encountered with traditional protein-blocking reagents, such as cross-reactivity and interference from glycosylation. Additionally, Protein-Free Blocking Buffers are compatible with antibodies and avidin/biotin systems. For ease of use, Protein-Free T20 Blocking Buffers contain the detergent Tween<sup>®</sup>-20, which improves blocking performance in many detection systems.

## Important Product Information

- The usage as described in these instructions may differ from other blocking solutions.
- Use the Protein-Free Blocking Buffers at the supplied concentration; do not dilute blocking buffer.
- A final concentration of 0.05% Tween<sup>®</sup>-20 in the blocking buffer often improves blocking; however, it is not required nor recommended for all systems. Use only high-quality products such as Surfact-Amps<sup>®</sup> 20 (Product No. 28320), which is a specially purified Tween<sup>®</sup>-20 free of peroxides and carbonyls that may interfere in some systems. Protein-Free T20 Blocking Buffers are supplied containing 0.05% Tween<sup>®</sup>-20 Detergent.
- The Protein-Free Blocking Buffers may be used as a protein stabilizer for drying antigen- or antibody-coated microplates. Dry plate completely before sealing in a plastic bag with desiccant. Store plate at 4°C.

## Procedure for Blocking ELISA Plates

1. Coat the ELISA plate with antigen or antibody according to standard procedures.
2. Add 300 µl of the Protein-Free Blocking Buffer to each well and incubate for 1 hour at room temperature. Alternatively, add 300 µl of blocking buffer to each well and immediately invert plate to empty contents. Repeat this process two more times.
3. Proceed with assay or invert plate, and allow it to completely dry for ~2 hours. Place dry plate in a plastic bag or other container with desiccant and store at 4°C.

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**Warranty:** Pierce Biotechnology products are warranted to meet stated product specifications and to conform to label descriptions when stored and used properly. Unless otherwise stated, this warranty is limited to one year from date of sale when used according to product instructions. Pierce Biotechnology's sole liability for the product is limited to replacement of the product or refund of the purchase price. Unless otherwise expressly authorized in writing by Pierce Biotechnology, Pierce products are supplied for Research Use Only and are intended to be used by a technically qualified individual. Pierce Biotechnology's quality system is certified to ISO 9001. Pierce Biotechnology products are not produced in accordance with FDA's current Good Manufacturing Practices. Pierce Biotechnology strives for 100% customer satisfaction. If you are not satisfied with the performance of a Pierce Biotechnology product, please contact Pierce Biotechnology or your local distributor.

## Procedure for Blocking Membranes

**Note:** Typically, using the Protein-Free T20 Blocking Buffers or adding a final concentration of 0.05% Tween<sup>®</sup>-20 to the blocking buffer produces the best results.

1. Add sufficient Protein-Free Blocking Buffer to cover the entire surface of the membrane.
2. Incubate for 1 hour at room temperature on a rocking platform.
3. Continue the blotting procedure using the Protein-Free Blocking Buffer to dilute primary and secondary antibodies.

## Additional Information

Please visit the Pierce web site for additional information related to this product including the following:

- Request your free copy of the Western Blotting Handbook and Troubleshooting Guide, which contains detailed Western Blotting protocols and dozens of SuperSignal<sup>®</sup> Substrate references
- Tech Tip protocol: Optimization of antigen and antibody concentrations for Western blots
- Tech Tip protocol: Optimization of blocking buffer and cross-reactivity determination
- Tech Tip protocol: Substrates for Blotting and ELISA Applications

## Related Pierce Products

34080	<b>SuperSignal<sup>®</sup> West Pico Chemiluminescent Substrate</b> , 500 ml, Western blotting substrate for horseradish peroxidase
34075	<b>SuperSignal<sup>®</sup> West Dura Chemiluminescent Substrate</b> , 100 ml, Western blotting substrate for horseradish peroxidase
34095	<b>SuperSignal<sup>®</sup> West Femto Chemiluminescent Substrate</b> , 100 ml, Western blotting substrate for horseradish peroxidase
32209	<b>Pierce ECL Western Blotting Substrate</b> , 250 ml, enhanced chemiluminescent (ECL) Western blotting substrate for horseradish peroxidase
21059	<b>Restore<sup>™</sup> Western Blot Stripping Buffer</b> , 500 ml
34090	<b>CL-XPosure<sup>™</sup> Film</b> , 5"× 7" sheets, 100 sheets/pkg
21065	<b>Erase-It<sup>®</sup> Background Eliminator Kit</b> , for eliminating background from X-ray film
28382	<b>BupH<sup>™</sup> Carbonate-Bicarbonate Buffer Packs</b> , 40 packs, ideal buffer for coating microplates
28372	<b>BupH<sup>™</sup> Phosphate Buffered Saline Packs</b> , 40 packs

## Reference

Antibodies: A laboratory Manual. Ed Harlow and David Lane, Cold Springs Harbor Laboratory, 1998.

Kathon<sup>®</sup> is a registered trademark of Rohm & Hass.

Tween<sup>®</sup> is a registered trademark of ICI Americas.

SuperSignal<sup>®</sup> Technology is protected by U.S. Patent # 6,432,662

Current versions of product instructions are available at [www.piercenet.com](http://www.piercenet.com). For a faxed copy, call 800-874-3723 or contact your local distributor.

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