

# Pierce<sup>®</sup> Protein-Free Blocking Buffers

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<b>Number</b>	<b>Description</b>
37585	<b>Pierce Protein-Free (TBS) Blocking Buffer</b> , 100mL, contains a proprietary compound in Tris-buffered saline, pH 7.4 with Kathon <sup>®</sup> Antimicrobial Agent
37570	<b>Pierce Protein-Free (TBS) Blocking Buffer</b> , 1L, contains a proprietary compound in Tris-buffered saline, pH 7.4 with Kathon Antimicrobial Agent
37571	<b>Pierce 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 Detergent and Kathon Antimicrobial Agent
37584	<b>Pierce Protein-Free (PBS) Blocking Buffer</b> , 100mL, contains a proprietary compound in phosphate-buffered saline, pH 7.4 with Kathon Antimicrobial Agent
37572	<b>Pierce Protein-Free (PBS) Blocking Buffer</b> , 1L, contains a proprietary compound in phosphate-buffered saline, pH 7.4 with Kathon Antimicrobial Agent
37573	<b>Pierce Protein-Free T20 (PBS) Blocking Buffer</b> , 1L, contains a proprietary compound in phosphate-buffered saline, pH 7.4 with 0.05% Tween-20 Detergent and Kathon Antimicrobial Agent

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

## Introduction

The Thermo Scientific Pierce 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-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-20 Detergent in the blocking buffer often improves blocking; however, it is not required nor recommended for all systems. Use only high-quality products such as Thermo Scientific Surfact-Amps 20 (Product No. 28320), which is a specially purified Tween-20 Detergent free of peroxides and carbonyls that may interfere in some systems. The Pierce Protein-Free T20 Blocking Buffers are supplied containing 0.05% Tween-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 300µL of the blocking buffer to each well and incubate for 1 hour at room temperature. Alternatively, add 300µL of blocking buffer to each well and immediately invert plate to empty contents. Repeat this process two more times.

- 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.

## Procedure for Blocking Membranes

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

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

## Additional Information

Please visit the website 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 Thermo Scientific SuperSignal Substrate references
- Tech Tip #24: Optimize antigen and antibody concentrations for Western blots
- Tech Tip #32: Guide to enzyme substrates for Western blotting

## Related Thermo Scientific Products

<b>34080</b>	<b>SuperSignal<sup>®</sup> West Pico Chemiluminescent Substrate, 500mL</b>
<b>34075</b>	<b>SuperSignal West Dura Chemiluminescent Substrate, 100mL</b>
<b>34095</b>	<b>SuperSignal West Femto Chemiluminescent Substrate, 100mL</b>
<b>32209</b>	<b>Pierce ECL Western Blotting Substrate, 250mL</b>
<b>21059</b>	<b>Restore<sup>™</sup> Western Blot Stripping Buffer, 500mL</b>
<b>34090</b>	<b>CL-Xposure<sup>™</sup> Film, 5"× 7" sheets, 100 sheets/pkg</b>
<b>21065</b>	<b>Pierce Background Eliminator Kit, for eliminating background from X-ray film</b>
<b>28382</b>	<b>BupH<sup>™</sup> Carbonate-Bicarbonate Buffer Packs, 40 packs</b>
<b>28372</b>	<b>BupH Phosphate Buffered Saline Packs, 40 packs</b>

## General References

Alegria-Schaffer, A., *et al.* (2009). Performing and optimizing Western blots with an emphasis on chemiluminescent detection. *Methods Enzymol* **463**:573-99.

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

Kathon is a trademark of The Dow Chemical Company.

Tween is a trademark of Croda International Plc.

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

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