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

Catalog Numbers 37585, 37570, 37571, 37584, 37572, 37573

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WARNING! Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from thermofisher.com/support.

#### **Product description**

Thermo Scientific<sup>™</sup> Pierce<sup>™</sup> Protein-Free blocking buffers contain a protein-free compound for blocking excess binding sites in ELISA, western blotting, arrays, and other immunochemical applications. These blocking buffers reduce or eliminate 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.

# Contents and storage

Product	Cat. No.	Amount	Storage
Pierce <sup>™</sup> Protein-Free (TBS) Blocking Buffer, protein-free compound in Tris-buffered saline, pH 7.4 <sup>[1]</sup>	37585	100 mL	Room termperature. Afer opening, store at 4°C.
Pierce <sup>™</sup> Protein-Free (TBS) Blocking Buffer, protein-free compound in Tris-buffered saline, pH 7.4 <sup>[1]</sup>	37570	1 L	
Pierce <sup>™</sup> Protein-Free T20 (TBS) Blocking Buffer, protein- free compound in Tris-buffered saline, pH 7.4 with 0.05% Tween <sup>™</sup> -20 Detergent <sup>[1]</sup>	37571	1 L	
Pierce <sup>™</sup> Protein-Free (PBS) Blocking Buffer, protein-free compound in phosphate-buffered saline, pH 7.4 <sup>[1]</sup>	37584	100 mL	
Pierce <sup>™</sup> Protein-Free (PBS) Blocking Buffer, protein-free compound in phosphate-buffered saline, pH 7.4 <sup>[1]</sup>	37572	1 L	
Pierce <sup>™</sup> Protein-Free T20 (PBS) Blocking Buffer, protein-free compound in phosphate-buffered saline,pH 7.4 with 0.05% Tween <sup>™</sup> -20 Detergent <sup>[1]</sup>	37573	1 L	

<sup>[1]</sup> With Kathon<sup>™</sup> Antimicrobial Agent

#### **Procedural guidelines**

- The usage as described in these instructions may differ from other blocking solutions.
- Pierce<sup>™</sup> Protein-Free blocking buffers are supplied in ready-to-use format. It is not recommended to dilute the blocking buffer.
- A final concentration of 0.05% Tween<sup>™</sup>-20 Detergent in the blocking buffer can Improve blocking performance; however, it is not required for recommended for all systems. Use only high-quality products such as Thermo Scientific<sup>™</sup> Surfact-Amps<sup>™</sup> 20 (Cat. No. 28320), which is a specially purified Tween<sup>™</sup>-20 Detergent free of peroxides and carbonyls that may interfere in some systems. The Pierce<sup>™</sup> Protein-Free T20 blocking buffers are supplied containing 0.05% Tween<sup>™</sup>-20 Detergent.
- Pierce<sup>™</sup> Protein-Free blocking buffers can 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.



# Block western blots

Note: For best results, use Pierce<sup>™</sup> Protein-Free T20 blocking buffer or add a final concentration of 0.05% Tween<sup>™</sup>-20 detergent to the blocking buffer.

- 1. After the protein transfer, remove the membrane from the transfer apparatus, then wash in deionized water for 5 minutes, using agitation to remove all transfer buffer.
- 2. Add sufficient Pierce<sup>™</sup> Protein-Free blocking buffer to cover the membrane.
- 3. Incubate for 1 hour at room temperature with shaking.
- 4. Continue with the western blotting procedure that is appropriate for your downstream detection. We recommend using Pierce<sup>™</sup> Protein-Free blocking buffer to dilute primary and secondary antibodies.

## **Block ELISA plates**

- 1. Coat the ELISA plate with antigen or antibody.
- Add 300 µL of Pierce<sup>™</sup> Protein-Free blocking buffer to each well, then incubate the plate for 1 hour at room temperature or 37°C. Alternatively, add 300 µL of blocking buffer to each well, then immediately invert the plate to empty contents. Repeat this process two more times.
- 3. Proceed with the ELISA protocol that is appropriate for your downstream detection.

For storage, invert plate for approximately 2 hours to dry. Transfer plate to a plastic bag or other container containing a desiccant, such as silica gel. Store the plate at 4°C.

# **Related products**

Products	Learn more
Western blotting reagents and accessories	thermofisher.com/westernblot
Western blot imaging and analysis	thermofisher.com/westernimaging
ELISA reagents and kits	thermofisher.com/ELISA
ELISA plate readers	thermofisher.com/microplatereaders

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For descriptions of symbols on product labels or product documents, go to thermofisher.com/symbols-definition.

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Revision	Date	Description
B.0	7 September 2021	Updated format
A.0	17 October 2015	New document

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