

# Blocker™ Casein

Pub. No. MAN0011286

Rev. B.0

Pub Part No. 2160553.4

**37528 37532 37582 37583**

Number	Description
37582	<b>Blocker Casein in PBS, 100 mL, 1% (w/v) casein (Hammarsten grade) in 100mM sodium phosphate, 150mM NaCl, pH 7.4 containing Kathon® Anti-microbial Agent</b>
37528	<b>Blocker Casein in PBS, 1L, 1% (w/v) casein (Hammarsten grade) in 100mM sodium phosphate, 150mM NaCl, pH 7.4 containing Kathon Anti-microbial Agent</b>
37583	<b>Blocker Casein in TBS, 100 mL, 1% (w/v) casein (Hammarsten grade) in 25mM Tris, 150mM NaCl, pH 7.4 containing Kathon Anti-microbial Agent</b>
37532	<b>Blocker Casein in TBS, 1L, 1% (w/v) casein (Hammarsten grade) in 25mM Tris, 150mM NaCl, pH 7.4 containing Kathon Anti-microbial Agent</b>

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

## Introduction

The Thermo Scientific Blocker Casein is a milk protein purified by the Hammarsten method and used for blocking excess binding sites in ELISA, Western blotting, immunohistochemistry and other immunochemical applications.

## Important Product Information

- Milk protein-based products may contain biotin that interferes with streptavidin and avidin systems. When using streptavidin and avidin enzyme conjugates, use Thermo Scientific Blocker BSA (Product No. 37520 and 37525), Thermo Scientific SuperBlock Blocking Buffer (Product No. 37515 and 37535) or Thermo Scientific StartingBlock Blocking Buffer (Product No. 37538 and 37542), which do not contain endogenous biotin.
- Because no blocking reagent is optimal for all systems, empirical testing is essential to determine the appropriate blocking buffer for each system. Determining the proper blocking buffer can increase sensitivity and prevent nonspecific signal caused by cross-reactivity between the antibody and the blocking reagent.
- Use Blocker Casein as supplied for initial testing. However, other concentrations may be beneficial for specific systems.
- A final concentration of 0.05% Tween™-20 Detergent added to Blocker Casein may improve 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 that is free of peroxides and carbonyls that may interfere in some systems.
- Blocker Casein diluted to 0.05% protein and containing 0.05% Tween-20 Detergent may be used as a diluent for antibodies to improve signal-to-noise ratios.

## General Procedure for Blocking Nonspecific Binding Sites

1. Add the blocking solution to the ELISA well, blotting membrane or immunohistochemical slide.
2. Incubate 30 minutes to 2 hours at room temperature or 37°C.
3. Continue with the standard protocol for the specific application.

**Note:** For best results, use a protein stabilizer when drying antigen or antibody coated microplates. Single protein blocking solutions such as Blocker™ BSA (Product No. 37520 and 37525) and SuperBlock™ Blocking Buffer (Product No. 37515 and 37535) are ideal for this application.

## Additional Information

Please visit the web site for additional information including the following items:

- Tech Tip#16: Block endogenous biotin
- Tech Tip #32: Guide to enzyme substrates for Western blotting
- Tech Tip #33: Guide to enzyme substrates for ELISA

## Related Products

<b>XP04200BOX</b>	<b>Novex™ Tris-Glycine protein gels</b> (see <a href="http://thermofisher.com/proteingels">thermofisher.com/proteingels</a> for a complete listing)
<b>NW04120BOX</b>	<b>Bolt™ Bis-Tris Plus protein gels</b> (see <a href="http://thermofisher.com/proteingels">thermofisher.com/proteingels</a> for a complete listing)
<b>88013</b>	<b>Nitrocellulose Membrane, 0.2µm, 7.9 x 10.5cm</b> , 15/pkg
<b>88114</b>	<b>PVDF Membrane, 0.45µm, 7.9 x 10.5cm</b> , 15/pkg
<b>15036</b>	<b>Sealing Tape for 96-Well EIA Plates</b> ; 100/pkg
<b>34580</b>	<b>SuperSignal West Pico Plus Chemiluminescent Substrate</b>
<b>34075</b>	<b>SuperSignal West Dura Extended Duration Substrate</b>
<b>21059</b>	<b>Restore™ Western Blot Stripping Buffer</b> , 500mL
<b>21065</b>	<b>Pierce™ Background Eliminator Kit</b> , for eliminating background from X-ray film
<b>34090</b>	<b>CL-XPosure™ Film</b> , 5" x 7" sheets, 100 sheets/pkg
<b>28372</b>	<b>BupH™ Phosphate Buffered Saline Packs</b> , 40 packs, each pack yields 500mL
<b>28376</b>	<b>BupH Tris Buffered Saline Packs</b> , 40 packs, each pack yields 500mL
<b>34028</b>	<b>1-Step™ Ultra TMB-ELISA</b> , 250mL
<b>37574</b>	<b>Ultra TMB Blotting</b> , 250mL
<b>37527</b>	<b>SEA BLOCK™ Blocking Buffer</b> , 500mL
<b>37575</b>	<b>Pierce Fast Blocker</b> , 100mL
<b>37576</b>	<b>Pierce Fast Blocker</b> , 500mL
<b>37578</b>	<b>StartingBlock in PBS</b> , 100mL
<b>37579</b>	<b>StartingBlock in TBS</b> , 100mL
<b>37582</b>	<b>Blocker Casein in PBS</b> , 100mL
<b>37583</b>	<b>Blocker Casein in TBS</b> , 100mL
<b>37584</b>	<b>Protein-Free Blocker in PBS</b> , 100mL
<b>37585</b>	<b>Protein-Free Blocker in PBS</b> , 100mL
<b>37520</b>	<b>Blocker BSA in TBS (10X)</b> , 125mL
<b>37580</b>	<b>SuperBlock Blocking Buffer in PBS</b> , 100mL
<b>37515</b>	<b>SuperBlock Blocking Buffer in PBS</b> , 1L
<b>37581</b>	<b>SuperBlock Blocking Buffer in TBS</b> , 100mL
<b>37535</b>	<b>SuperBlock Blocking Buffer in TBS</b> , 1L

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

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