# **INSTRUCTIONS**



# Blocker<sup>TM</sup> BLOTTO in TBS

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37530

Number

**Description** 

37530

**Blocker BLOTTO in Tris Buffered Saline (TBS),** 1L, contains 5% (w/v) nonfat powdered milk in 25mM Tris, 150mM NaCl, pH 7.4 with 0.01% Antifoam A and Kathon<sup>TM</sup> Anti-microbial Agent

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

### Introduction

The Thermo Scientific Blocker BLOTTO is a preformulated nonfat milk solution 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), SuperBlock Blocking Buffer (Product No. 37515 and 37535) or 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 BLOTTO at a concentration of ~1% protein for initial testing. However, other concentrations may be beneficial for specific systems.
- A final concentration of 0.05% Tween<sup>TM</sup>-20 Detergent added to Blocker BLOTTO 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 BLOTTO diluted to 1% 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 on Our Website**

- Tech Tip #24: Optimize antigen and antibody concentrations for Western blots
- Tech Tip #32: Guide to enzyme substrates for Western blotting
- Tech Tip #33: Guide to enzyme substrates for ELISA
- Tech Tip #16: Block endogenous biotin

#### **Related Products**

XP04200BOX	$\textbf{Novex}^{\texttt{TM}} \ \textbf{Tris-Glycine protein gels} \ (\text{see} \ \underline{\text{thermofisher.com/proteingels}} \ \text{for a complete listing})$
NW04120BOX	Bolt™ Bis-Tris Plus protein gels (see thermofisher.com/proteingels for a complete listing)
34580	SuperSignal West Pico Plus Chemiluminescent Substrate, 500mL
34075	SuperSignal West Dura Extended Duration Substrate, 100mL
21059	Restore™ Western Blot Stripping Buffer, 500mL
21065	Pierce™ Background Eliminator Kit
34090	CL-XPosure <sup>TM</sup> Film, 5" × 7" sheets, 100 sheets/pkg
28376	BupH <sup>TM</sup> Tris Buffered Saline Packs, 40 packs
28372	BupH Phosphate Buffered Saline Packs, 40 packs
37527	SEA BLOCK™ Blocking Buffer, 500mL
37528	Blocker Casein in PBS, 1L
37520	Blocker BSA in TBS (10X), 125mL

Tween is a trademark of Croda International Plc.

Kathon is a trademark of The Dow Chemical Company.

For research use only. Not for use in diagnostic procedures.

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 thermofisher.com. For a faxed copy, call 800-874-3723 or contact your local distributor.

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