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Datasheet for MB-073-003

BlockOut® Universal Blocking Buffer for Western Blotting 3-PACK

Overview

Description:	BlockOut® Universal Blocking Buffer for Western Blotting 3-PACK (3x500mL) - MB-073-003
Item No.:	MB-073-003
Size:	3 x 500 mL
Applications:	Microarray, WB

Product Details

Background:	BlockOut® Universal Blocking Buffer Solution for Western Blotting is specifically designed for colorimetric, chemiluminescent, and fluorescent western blotting. BlockOut® is recommended for blocking when phospho specific antibodies are used. Pure nitrocellulose membrane is recommended for maximum performance. Other membranes, such as PVDF or nitrocellulose embedded in a support can be used, but may generate elevated backgrounds. Protein should be transferred from gel to membrane using standard protocols. BlockOut® Blocking buffer can be used for membrane blocking and to dilute both primary and secondary antibodies. BlockOut® is suitable for use with chemiluminescent and fluorescent western blot imaging systems produced by Bio-Rad Laboratories, GE Healthcare, Alpha Innotech, FujiFilm Life Science, Licor Biosciences, UVP and Syngene.
Synonyms:	Multiplex Blocking Buffer, Immunoblot Blocking Buffer, Blocking Solution, Blocking Buffer Western Blot, Western Blot Blocking Buffer, Alexa Dye Blocking Buffer, DyLight Blocking Buffer, colorimetric, chemiluminescent blocking buffer, WB block, BlockOut®

Target Details

Purity/Specificity:	Blocking buffer was prepared using ultra pure reagents dissolved in pharmaceutical grade water (WFI) and consists of a proprietary protein formulation in TRIS buffered saline at pH 7.6 with thimerosal added as an antimicrobial agent.
Relevant Links:	• MB-073 SDS

Application Details

Suggested Applications:	Microarray, WB (Based on references)

Application Note:	BlockOut® allows for superior signal detection and lower background noise in colorimetric, chemiluminescent, and fluorescent western blotting and other applications making it a convenient general purpose blocking agent. Antibody conjugates prepared with IRDye® 800 and IRDye® 700DX (Licor), Cy2™, Cy3™, Cy3.5™, Cy5™ and Cy5.5™ (GE Healthcare), DyLight™405, DyLight™ 549, DyLight™ 649, DyLight™ 680, and DyLight™ 800 (Thermo Fisher/Pierce) and Alexa Fluor® 488, Alexa Fluor® 532, Alexa Fluor® 546, Alexa Fluor® 647 and Alexa Fluor® 680 (Invitrogen/Molecular Probes) and ATTO (Atto-Tec) have been validated on various platforms using this product with superior results compared to other commercially available products. In the infrared range, where little to no autofluorescence occurs, specific signal is sharply evident from any background giving the best possible signal-to-noise ratio. This allows for detection levels in the picogram range which rivals the sensitivity of chemiluminescence on film for western blotting. Superior results are also seen when this product is used for simultaneous labeling (multiplex) in western blots or microscopy using various fluorochrome combinations for multicolor imaging. Membranes blocked with BlockOut® can be dried and are very stable.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
WB:	User Defined

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 X
Buffer:	See application note.
Preservative:	Thimerosal is added as an antimicrobial agent.

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store Blocking Buffer at 4° C prior to opening. DO NOT FREEZE.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



Bottle
BlockOut® Universal Blocking Buffer for Western Blotting

References

- Enriquez A et al Neurodegenerative NMNAT2 Deficiency Promotes APP Processing in a SARM1-Dependent Manner. *Cells.* (2026)
- Syed I et al. SPRY domains encode ubiquitin ligase specificity for ZAP and RIG-I. *PLoS Pathog.* (2026)
- Charli A et al. Mitochondrial stress disassembles nuclear architecture through proteolytic activation of PKCδ and Lamin B1 phosphorylation in neuronal cells: implications for pathogenesis of age-related neurodegenerative diseases. *Front Cell Neurosci.* (2025)
- Vashisht K et al. Exploring the Immunodominant Epitopes of SARS-CoV-2 Nucleocapsid Protein as Exposure Biomarker. *Cureus.* (2023)
- Bannert K, Berlin P, Reiner J, et al. SNX27 regulates DRA activity and mediates its direct recycling by PDZ-interaction in early endosomes at the apical pole of Caco2 cells. *Am J Physiol Gastrointest Liver Physiol.* (2020)
- Choudhary S, Buxton SK, Puttachary S, et al. EAT-18 is an essential auxiliary protein interacting with the non-alpha nAChR subunit EAT-2 to form a functional receptor. *PLoS Pathog.* (2020)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.