

TrueBlack® WB Blocking Buffer Kit

Buffer system optimized for fluorescence-based western provides superior specificity, sensitivity, and background suppression.



Product attributes

Storage Conditions

Store at 2 to 8 °C

Product Description

The TrueBlack® WB Blocking Buffer Kit is a ready-to-use buffer system for fluorescence-based western blotting (WB). The buffers are designed to achieve optimal specificity and sensitivity by blocking background from the non-specific interaction between the dye-labeled antibodies and blotting membranes.

- Blocks non-specific protein binding, reducing background fluorescence over the entire membrane
- Works as well or better than LI-COR's Odyssey® Blocking Buffer, at a lower cost
- Suppresses background caused by charged fluorescent dyes and non-specific protein binding
- Compatible with PVDF and nitrocellulose membranes
- For fluorescence detection with visible and NIR dyes
- Non-mammalian blocking agents, for broad secondary antibody compatibility
- TBS based buffer suitable for phosphoprotein detection
- **NOT designed for chemiluminescence detection using HRP conjugated antibodies**

Note: The TrueBlack® WB Blocking Buffer (Cat. No. 23013A-500ML) and TrueBlack® WB Antibody Diluent (23013B-1L) are available as standalone products. The standalone TrueBlack® WB Antibody Diluent is particularly useful for users who have evaluated the kit and prefer to use the antibody diluent but not the blocking buffer.

Superior Blocking for Fluorescent WB

Non-specific background in fluorescence-based western blotting can arise from multiple sources, including antibody cross-reactivity with off-target proteins, non-specific antibody adsorption to the membrane, and membrane autofluorescence. Another potential cause of background that is not well-known is the effect of fluorescent dyes themselves on the specificity of labeled antibodies.

Next-generation fluorescent dyes like Alexa Fluor® or CF® dyes often carry multiple negative charges to improve dye solubility and brightness of conjugates. However, the extra charge carried by the dye can result in non-specific antibody binding and background fluorescence. The TrueBlack® WB Blocking Buffer Kit blocks background from multiple sources including charged dye conjugates. It is especially advantageous for phosphoprotein detection, significantly improving specificity compared to conventional blocking buffers.

Excellent Performance and Value

The TrueBlack® WB Blocking Buffer Kit includes blocking buffer and antibody diluent for primary and secondary antibody incubation steps. The number of membranes that can be processed per kit is based on 10 mL per incubation (blocking, primary antibody, and secondary antibody); the actual number of membranes may vary depending on protocol used and membrane size. When compared to LI-COR's Odyssey® Blocking Buffer, the TrueBlack® WB Blocking Buffer works as well or better, and is priced lower on a per membrane basis. See below for a size comparison.

Comparison between TrueBlack® WB Blocking Buffer Kit and Odyssey® Blocking Buffer

Product	TrueBlack® WB Blocking Buffer Kit	Odyssey® Blocking Buffer
Trial Size	For 10 membranes	125 mL for 4 membranes
Full Size	For 50 membranes	500 mL for 16 membranes

Number of membranes if Odyssey® Blocking Buffer is used for each blocking and antibody dilution step. TrueBlack® WB Blocking Buffer Kit includes enough buffers for all blocking and antibody incubation steps for the stated number of membranes.

The TrueBlack® WB Blocking Buffer Kit belongs to our TrueBlack® line of background reducing agents for fluorescence applications, which includes [TrueBlack® Lipofuscin Autofluorescence Quencher](#) for tissue staining, and [TrueBlack® IF Background Suppressor System \(Permeabilizing\)](#) for blocking non-specific immunofluorescence staining.

Alexa Fluor is a registered trademark of Thermo Fisher Scientific. LI-COR and Odyssey are registered trademarks of LI-COR Inc.

References

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