SwiftBlock™ Blocking Buffer for Western Blot (Fast)

Introduction

SwiftBlock™ Blocking Buffer for Western Blot (Fast) is a next-generation, rapid and efficient blocking solution specifically designed for Western blot experiments, formulated in PBS. This product contains no serum, albumin, or biotin, but includes preservatives that do not affect HRP or AP activity. It is primarily used for blocking PVDF membranes or nitrocellulose (NC) membranes in Western blot (WB) assays, as well as for diluting primary and secondary antibodies in Western blot experiments.

This blocking buffer is fast and efficient, typically requiring only 5–15 minutes. Compared to traditional blocking agents (e.g., BSA, non-fat dry milk, casein), it provides a superior signal-to-noise ratio. The absence of serum and albumin ensures an extremely high signal-to-noise ratio and very low background after blocking. It is compatible with horseradish peroxidase (HRP), alkaline phosphatase (AP), and biotin-labeled secondary antibodies. The product is convenient to use, requiring no additional reagents, and can be directly applied for membrane blocking.

Protocol

1. Wash the membrane: After transfer, wash the membrane in Western wash buffer for 1–2 minutes.
2. Prepare membrane blocking solution: Depending on the membrane size, pour an appropriate volume of SwiftBlock™ Blocking Buffer for Western Blot (Fast) into a suitable container (e.g., a petri dish) to ensure the solution fully covers the membrane. For a standard Western Blot experiment, approximately 10 mL of blocking solution is recommended for a membrane of about 6.6 × 8.5 cm.
3. Transfer the membrane: Using flat-tipped tweezers, hold one corner of the membrane and place it into the prepared blocking solution, ensuring the membrane is completely submerged.
4. Block the membrane: Place the container with the membrane submerged in blocking solution on an orbital shaker and block for approximately 10 minutes (typically 5–15 minutes is sufficient).

***Note:** Tests with a variety of antibodies have shown that blocking for 10 minutes is often significantly more effective than conventional blocking with BSA for 1 hour.

5. Antibody incubation: After blocking, the membrane can be used directly for primary antibody incubation and subsequent steps.

Note

1. Storage and transportation conditions: 4°C storage, valid for one year; It can be stored at -20°C if not used for a long time. Blue Ice Transport.
2. For PVDF and NC films, the conventional blocking time is 5-15 minutes. If the antibody background is extremely high, try extending the blocking time to 30 to 60 minutes. If special needs are required, it is also feasible to enclose overnight at 4°C.
3. Related product recommendations are as follows:

Catalog No.	Product Name	Size
K4122	SwiftBlock™ Blocking Buffer (PBS, Fast)	100 mL/500 mL
K4123	SwiftBlock™ Blocking Buffer (PBSTw, Fast)	100 mL/500 mL
K4124	SwiftBlock™ Blocking Buffer (PBSTx, Fast)	100 mL/500 mL
K4125	SwiftBlock™ Blocking Buffer (TBS, Fast)	100 mL/500 mL
K4126	SwiftBlock™ Blocking Buffer (TBSTw, Fast)	100 mL/500 mL
K4127	SwiftBlock™ Blocking Buffer (TBSTx, Fast)	100 mL/500 mL
K4128	SwiftBlock™ Blocking Buffer (10X, Fast)	100 mL/500 mL
K4129	SwiftBlock™ Blocking Buffer for Western Blot (Fast)	100 mL/500 mL
K4130	SwiftBlock™ Blocking Buffer for Immunol Staining (Fast)	100 mL/500 mL
K4140	Primary Antibody Dilution Buffer for Western Blot (Fast)	100 mL/500 mL
K4662	Western Secondary Antibody Dilution Solution (Fast)	100 mL/500 mL
K4663	Immunol Staining Primary Antibody Dilution Solution (Fast)	100 mL/500 mL
K4664	Immunohistochemistry Secondary Antibody Dilution Solution (Fast)	100 mL/500 mL

4. This product is for scientific research use only.

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