Western Blot Stripping Buffer

Catalogue Information

Catalogue No.	Product Name	Pack Size
WS BL1381A	Western Blot Stripping Buffer (Acidic)	100 mL
WS BL1381B	Western Blot Stripping Buffer (Acidic)	500 mL
WS BL1383A	Western Blot Stripping Buffer (Alkaline)	100 mL
WS BL1383B	Western Blot Stripping Buffer (Alkaline)	500 mL

Product Description

Western Blot Stripping Buffers are specialized reagents designed for the efficient removal of bound primary and secondary antibodies from Western blot membranes, allowing the reuse of the same membrane for subsequent probing with different antibodies. They enable multiple rounds of protein detection on a single membrane, saving time, samples, and reducing variability caused by reloading. Two formulations are available to meet different experimental needs:

Acidic Stripping Buffer (BL1381) – Utilizes a mild acidic composition, free from organic solvents such as β-mercaptoethanol. It removes antibodies rapidly and effectively while maintaining protein integrity on the membrane. Suitable for most chemiluminescent Western blot workflows.

Alkaline Stripping Buffer (BL1383) – Uses a gentle alkaline formulation to disrupt antibody binding without compromising membrane-bound proteins. Ideal for PVDF membranes and chemiluminescent detection systems such as ECL. Generally allows 2–3 reuse cycles of the same membrane..

Usage Instructions

Acidic Stripping Buffer (BL1381)

1. After exposure, remove the membrane and add sufficient buffer to fully cover it.
2. Incubate at room temperature for 15 minutes with gentle shaking. For high-abundance proteins (e.g., housekeeping proteins), extend incubation to 1 hour or incubate at 37 °C for 30 minutes.
3. Discard the buffer and wash the membrane three times with PBST or TBST for 5 minutes each.
4. Verify complete antibody removal using a chemiluminescent substrate if necessary.
5. After confirming no residual enzyme activity, block the membrane using Western Blocking Buffer for 30 minutes at room temperature or overnight at 2–8 °C.
6. Proceed with reprobing using a new set of antibodies.

Alkaline Stripping Buffer (BL1383)

1. After exposure, rinse the membrane in distilled water for 5 minutes.
2. Add enough buffer to fully submerge the membrane and incubate on a shaker for 5 minutes.
3. Remove and discard the buffer completely, blotting excess if needed.
4. Wash the membrane with distilled water 2–3 times for 3–5 minutes each.
5. Block the membrane using an appropriate blocking solution (5% non-fat milk for HRP systems, casein for AP systems) before proceeding with reprobing.
6. Continue with standard Western blot detection steps.

Note:

1. When using both buffers, start with the acidic formulation for gentle antibody removal, followed by the alkaline buffer if stronger stripping is required.

2. For chemiluminescent detections (e.g., ECL), both buffers are suitable. Do not use with colorimetric detection methods such as DAB or NBT/BCIP.
3. PVDF membranes perform better than nitrocellulose membranes for repeated use.
4. It is recommended to detect low-abundance proteins before high-abundance housekeeping proteins to avoid signal interference.
5. For HRP-conjugated antibodies, use 5% non-fat milk as blocking reagent; for AP-conjugated antibodies, use casein.
6. For research use only by qualified personnel. Not for clinical, therapeutic, food, or pharmaceutical applications.
7. Always wear laboratory coat and gloves when handling.

Storage Conditions

Acidic Stripping Buffer: Store at 4 °C. Stable for one year under recommended conditions.
Alkaline Stripping Buffer: Store at room temperature, protected from light. Stable for one year under recommended conditions.

Notice

For in vitro research use only, not for diagnostic or therapeutic use. This product is not a medical device.
Contact:

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