5 × Protein-Free Rapid Blocking Diluent

Catalog #: RA10052

Product Overview

This product is a protein-free, highly efficient, rapid, and low-background Western blotting buffer. The entire blocking process takes only 5-10 minutes and can replace traditional blocking buffers such as skim milk powder and BSA. This product is formulated in TBS buffer containing an appropriate concentration of detergent and is a concentrated form; it must be diluted with water according to the specified ratio before use.

This product can also be used for dilution of primary or secondary antibodies in Western blotting experiments, and is applicable to conventional antibodies, phosphorylated antibodies, biotin-labeled antibodies, etc.

Product Information

Product Name	Storage	Size 1	Size 2
5 × Protein-Free Rapid Blocking Diluent	2-8℃	100mL	500mL
Manual	-	1pcs	1pcs

Transport at room temperature, store at 2-8℃ , shelf life 18 months .

Product Advantages

- **Low background:** Higher signal-to-noise ratio, cleaner background **.**
- **High efficiency:** Rapid sealing in 5-10 minutes.
- **General purpose:** Can be used for blocking purposes and can be used as an antibody diluent.
- **Compatibility:** Compatible with conventional primary antibodies, as well as secondary antibodies labeled with horseradish peroxidase, alkaline phosphatase, and biotin.
- **Protein-free:** The protein-free design avoids signal interference.

Operating procedures

Membrane sealing

1. Take an appropriate amount of 5 × protein-free rapid blocking dilution solution and dilute it with ddH2O at a ratio of 1:4 to make 1 × working solution ;
2. Wash the transferred membrane with washing solution 1-2 times, 1 minute each time;
3. Place the membrane in an appropriate volume of 1 × working solution, ensuring that the working solution fully covers the membrane. Usually, the entire membrane requires more than 10 mL of working solution.
4. sealing in a shaker at room temperature for 5-10 minutes , wash the membrane 1-2 times with washing solution for 1 minute each time, and then proceed with antibody incubation.

Antibody incubation

1. An appropriate amount of 5× protein-free rapid blocking dilution buffer and dilute it with ddH2O at a ratio of 1:4 to make 1 × working solution ;
2. Prepare the primary antibody working solution using diluted 1 × working solution , add an appropriate amount of primary antibody working solution to fully cover the membrane, and incubate on a shaker at room temperature for 2 hours or overnight at 4°C.
3. Discard or recover the primary antibody working solution , and wash 3 times with an appropriate amount of washing solution, each time for 5-10 minutes;
4. Prepare the secondary antibody working solution using diluted 1 × working solution , add an appropriate amount of secondary antibody working solution to fully cover the membrane, and incubate on a shaker at room temperature for 1 hour ;
5. Discard or recover the secondary antibody working solution , and wash 3 times with an appropriate amount of washing solution, each time for 5-10 minutes;
6. Proceed to the next color development experiment.

Precautions

1. This product is recommended for single use only; repeated use may affect the sealing effect.
2. Usually, sealing for 5-10 minutes is sufficient, but the sealing time can be extended to 30-60 minutes depending on the specific circumstances;
3 . The applicability of blocking varies depending on the experiment and the antibody; special experiments require trial and error based on specific circumstances.
4. This product is for research use only.