

EzBlock Chemi

Instruction manual

Aug. 6, 2025 5th edition

1. Precautions for safe use of this product

To use this product safely, please read this instruction manual carefully first. Please refrain from operating the product until you fully understand the contents of this instruction manual. This instruction manual describes only how to use this product for the specified purpose. Please refrain from using the product for purposes or in ways not described in this instruction manual. If you use the product for purposes or in ways not described in this instruction manual, you are solely responsible for all necessary safety measures and unforeseen circumstances. Also, please carefully read and understand the instruction manuals of any devices you will be using at the same time.

2. Purpose of use

This product is a blocking reagent and antibody diluent for blotting membranes and ELISA plates used in Western blotting and ELISA reactions.

3. Product Configuration

Name	Volume	Quantity
EzBlock Chemi	500 mL	1

4. Composition

Name	Composition
EzBlock Chemi	Tris(hydroxymethyl)aminomethane, Sodium chloride, Non-proteinaceous synthetic resin polymer, (Stock solution 5 times more concentrated than the working solution.)

This Product does not contain any poisonous or deleterious substances under the Poisonous and Deleterious Substances Control Law, or any substances subject to notification that exceed the exemption amounts stipulated under the Industrial Safety and Health Law or the PRTR Law. For details, please download the SDS for this product from the ATTO website (<https://www.atto.co.jp/>).

5. Storage

- Store **EzBlock Chemi** in the refrigerator (2–10°C). If unopened, it is stable until the expiration date.
- Do not mix **EzBlock Chemi** stock solution with other blocking reagents.
- If **EzBlock Chemi** stock solution is left at room temperature for a long time, it may become cloudy, but this does not affect its performance. It will return to transparency if stored in the refrigerator (2–10°C) again.

6. Disposal method

- Dispose of each reagent in accordance with the disposal method of your affiliated institution.
- Bottle material Body and lid: Polypropylene

7. Items required other than this product

- Distilled water

8. Precautions for use

- This product is a 5x stock solution of a blocking agent whose main component is a non-proteinaceous synthetic resin polymer. When using, dilute according to the instructions.
- One bottle of **EzBlock Chemi** can block the blotting membrane equivalent to approximately 50 mini slab gels.
- Does not contain sodium azide, which inhibits the activity of HRP (horseradish peroxidase).

9. How to use

A. When using as a blocking reagent for Western blotting

1. Dilute **EzBlock Chemi** 5 times with distilled water. The minimum amount is 0.65 mL/cm². For mini slab gels, about 50 mL is required. To make 50 mL of working solution, mix 10 mL of **EzBlock Chemi** stock solution with 40 mL of distilled water.

*You can also add other blocking agents when making **EzBlock Chemi** working solution.

*When further diluting **EzBlock Chemi** working solution, use **EzTBS** (+ **EzTween**) or TBS-T.

2. Put **EzBlock Chemi** working solution in a container that allows the blotting membrane to move freely in the shaking direction.
 3. Immerse the blotting membrane in **EzBlock Chemi** working solution and shake at room temperature for 30 to 60 minutes.
- *Please note that a long blocking time (more than one hour) may cause overblocking.

B. When using as a blocking reagent for ELISA

1. Dilute **EzBlock Chemi** 5 times with distilled water. To make 50 mL of working solution, mix 10 mL of **EzBlock Chemi** stock solution with 40 mL of distilled water.
2. Add 100-300 µL of **EzBlock Chemi** working solution per well of a 96-well plate.
3. Incubate at room temperature for 30-60 minutes.

*After blocking, the ELISA plate can be dried and stored in a refrigerator after removing the blocking agent. The storage period depends on the stability of the protein and antibody coated on the ELISA plate, so please consider this.

C. When using as an antibody diluent

1. Dilute **EzBlock Chemi** 5 times with distilled water. To make 50 mL of working solution, mix 10 mL of **EzBlock Chemi** stock solution with 40 mL of distilled water.

*When diluting the **EzBlock Chemi** working solution further, please use **EzTBS** (+ **EzTween**) or TBS-T.

*In general, if the antibody diluent used in Western blotting does not contain an appropriate amount of salt or surfactant, the background tends to be high.

10. Reference materials

Even when following the same protocol, small variations in technique may result in large differences in outcomes. For detailed experimental tips, please visit the ATTO website (<https://www.atto.co.jp/>) to download our know-how resources.



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