

EzStandard II Instruction Manual

September 3, 2025 3rd 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 molecular weight marker (unstained) for SDS-PAGE** consisting of 7 proteins. It can be visualized by various staining methods (silver staining, CBB staining, etc.).

3. Product configuration

Name	Volume	Quantity	Storage
EzStandard II	0.5 mL/ tube	1	-20°C or below

4. Composition

Name	Main component
EzStandard II	7 protein components: 220, 97, 66, 45, 30, 20 and 14.3 kDa SDS, Glycerol, bromophenol blue (BPB), buffer solution

This product contains substances subject to notification that exceed the exemption quantities specified under the PRTR Act, the Poisonous and Deleterious Substances Control Act, and the Industrial Safety and Health Act. For details, please download and refer to the SDS for this product from the ATTO website (<https://www.atto.co.jp>).

5. Storage

- This product should be stored frozen (-20 °C or below). If it is unopened, it is stable until the expiration date. The expiration date is printed on the outer packaging.
- After dissolving this product, dispense into appropriate amounts and store frozen (-20 °C or below). Avoid freezing and thawing during use.
- This product is stable for approximately 24 hours when refrigerated (2-10 °C).

6. Disposal method

- Dispose of each reagent in accordance with the disposal method of your affiliated institution.

7. Items required other than this product

- Electrophoresis gel
- Electrophoresis reagents (sample buffer, electrode solution, etc.)
- Electrophoresis equipment
- Small centrifuge

8. Precautions for use

- This product will be delivered refrigerated or frozen. **Please store in a freezer (-20 °C or below) immediately after delivery.**
- When dissolving this product, avoid heating or vigorous mixing and be careful not to create bubbles.
- After dissolving this product, mix well, dispense into appropriate amounts, and store in a freezer (-20 °C or below). **Avoid freezing and thawing before use.**
- This product is stable for approximately 24 hours when refrigerated (2-10 °C).
- This product is a molecular weight marker for SDS-PAGE. It is suitable for SDS-PAGE using polyacrylamide gels. It cannot be used for Native PAGE.

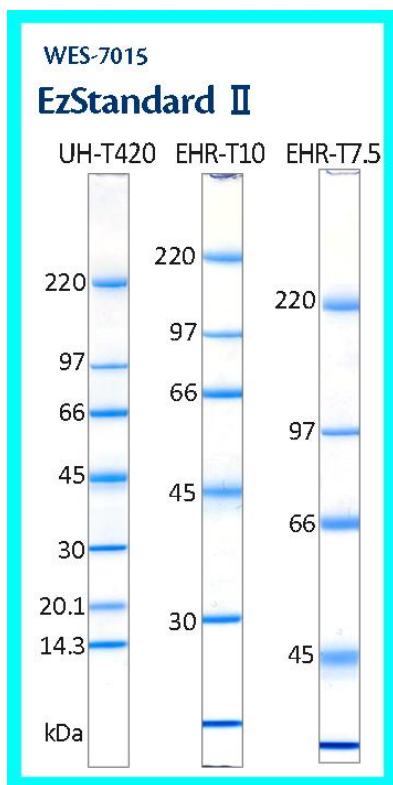
9. How to use

1. Dissolve **EzStandard II** completely at room temperature (15-30 °C).
2. Mix thoroughly by tapping or inverting, taking care not to create bubbles.
3. Spin down using a small centrifuge.
4. When using mini gel electrophoresis, use 2-10µL per lane. When detecting with highly sensitive staining such as silver staining or fluorescent staining, use 0.05-0.5µL per lane.
5. After using it, promptly dispense and freeze (-20 °C or below). If you plan to use it again on the same day, store it on ice or in the refrigerator.

***After use, mix well, dispense into appropriate amounts, and store frozen (-20 °C or below). Avoid freezing and thawing.**
6. Run the gel until the dye (BPB), which indicates the electrophoretic front, reaches 5-10mm above the bottom of the gel

10. Others

The separation pattern and molecular weight of **EzStandard II**.



molecular weight	Protein	concentration mg/mL
220,000	Myosin, from chicken muscle	
97,000	Phosphorylase B, from rabbit muscle	0.070
66,000	Albumin, from bovine serum (BSA)	0.100
45,000	Ovalbumin, from chicken egg white	0.160
30,000	Carbonic anhydrase, from bovine erythrocytes	0.100
20,100	Trypsin inhibitor, from soybean	0.100
14,300	Lysozyme, from chicken egg white	0.120

Gel : u-PAGEL H e-PAGEL HR	Left : UH-T420 Center : UH-T10L Right : EHR-T7.5L
Standard	4 μ L /lane (EzStandard II)
Running Buffer	EzRun
Running condition	300 V constant voltage, 30-35min
Staining	EzStain AQua (microwave method)

