

EzStandard HMW

Instruction Manual

August 27, 2025 2nd 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 11 proteins in the high molecular weight range. It can be visualized by various staining methods (silver staining, CBB staining, etc.).

3. Product configuration

Name	Volume	Quantity	Storage
EzStandard HMW	0.1 mL/ tube	4	-20°C or below

4. Composition

Name	Main component
EzStandard HMW	11 protein components: 770, 270, 220, 170, 140, 116, 97, 77, 66, 45 and 29 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

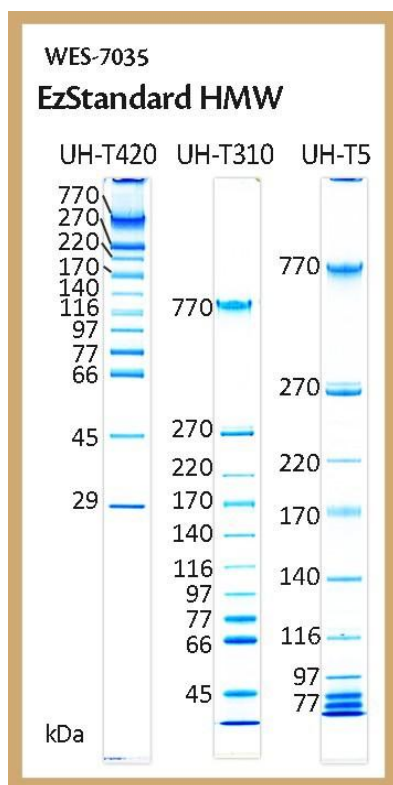
- This product will be delivered frozen. **Please store in a freezer (-20 °C or below) immediately after delivery.**
- When dissolving this product, avoid heating or vigorous mixing and be careful not to create bubbles.
- After dissolving this product, mix well, dispense into appropriate amounts, and store in a freezer (-20 °C or below). **Avoid freezing and thawing before use (up to 5 times).**
- This product is stable for approximately 24 hours when refrigerated (2-10 °C).
- This product is a molecular weight marker for high molecular weight range. It is suitable for SDS-PAGE using polyacrylamide gels such as **u-PAGE H**. It cannot be used for Native PAGE.

9. How to use

1. Dissolve **EzStandard HMW** completely at room temperature (15-30 °C).
* Do not heat when dissolving.
2. Mix thoroughly by tapping or inverting, taking care not to create bubbles.
* High-molecular-weight proteins may increase in viscosity during storage. Upon thawing, the solution may lose its homogeneity; therefore, always mix thoroughly to ensure it is uniform.
* Vigorous mixing, such as vortexing, may cause degradation of high-molecular-weight proteins. Please handle with care.
3. Spin down using a small centrifuge.
4. When using mini gel electrophoresis, use 3-5µL 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 (up to 5 times).
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 HMW**.



Gel : u-PAGEL H	Left: UH-T420 Center: UH-T310 Right: UH-T5
Standard	3μL/lane (EzStandard HMW)
Running Buffer	EzRun
Running condition	300 V constant voltage, 30-35min
Staining	EzStain AQua (microwave method)

