

MQ Nano-Tech Protein Staining Solution (5X)

Cat No: PSS-M-5X-500

Size: 500ml

Stored at 18-25°C

MOLEQULE-ON[®]

Description

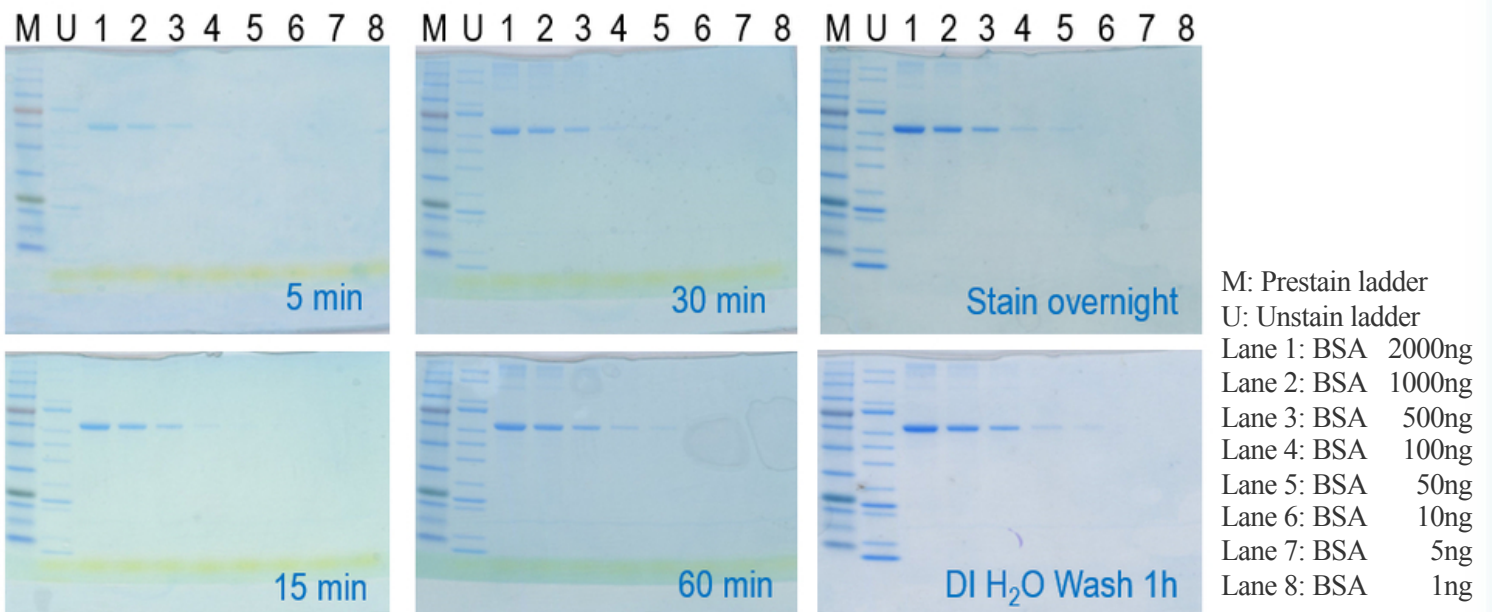
MQ Nano-Tech Protein Staining Solution, improved by nano-technology, is available as 5X concentrate used for SDS-PAGE gels. Its next generation formula offers a faster protein detection, higher sensitivity and there is no need for destaining. Also, the washing step can be omitted. In the absence of hazardous substances such as methanol and acetic acid, it is considered to be safe and environmentally friendly. MQ Nano-Tech Protein Staining Solution is also compatible with mass spectrophotometry.

Features

- Clear background
- Fast staining
- No need for destaining
- No washing step needed
- No overstaining issue
- No hazardous materials inside
- No need to microwave or heat

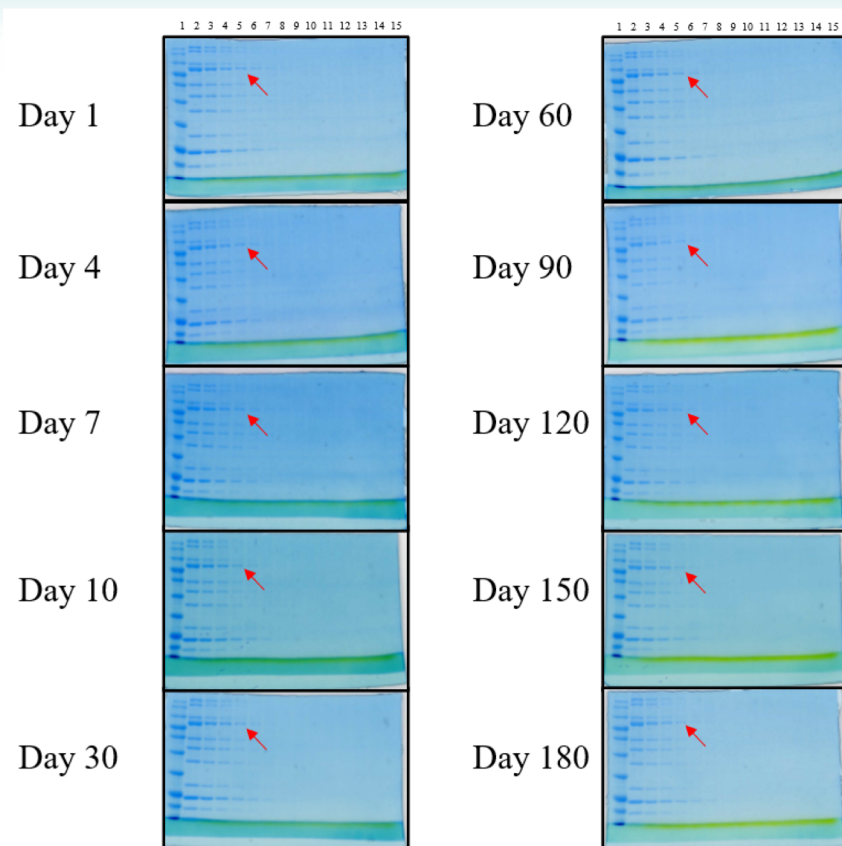
Required materials but not provided

- Container: box for gel staining
- Shaker: orbital or rocking shaker

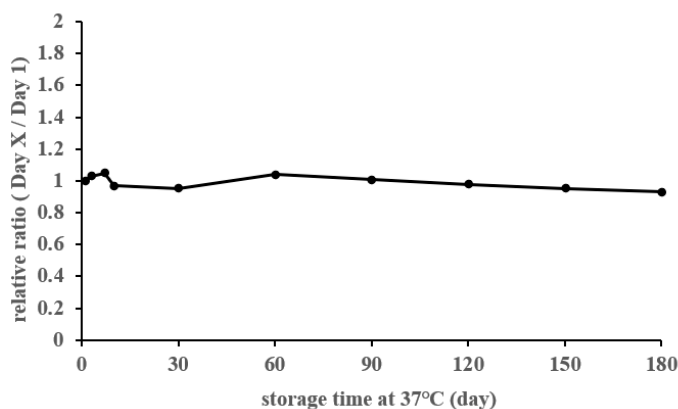


Time Saving Orientation

Prestained protein ladder, unstained protein ladder, and BSA were prepared and applied in electrophoresis. After running SDS-PAGE (4-20%), gel was removed from the cassette then proceed to submerge the gel in proper amount of MQ Nano-Tech Protein Staining Solution, enough to cover the gel. The staining box was lightly agitated for 5 minutes to over night at room temperature.



Analysis of 85kDa band of lane 5 (red arrow) was done, The band intensity between different storage time at 37°C was compared. The variation is under 10%.



High Sensitivity Orientation

M1 A B C D E F G H I M2



MQ Nano-Tech Protein Staining Solution demonstrates the high sensitivity detection could be down to 10 ng (Lane H). Prestained protein ladder, unstained protein ladder, and serial diluted BSA were prepared and applied in electrophoresis.

Lane M1: Prestained Protein Ladder

Lane A: BSA 2000 ng

Lane B: BSA 1000 ng

Lane C: BSA 500 ng

Lane D: BSA 100 ng

Lane E: BSA 50 ng

Lane F: BSA 25 ng

Lane G: BSA 12.5 ng

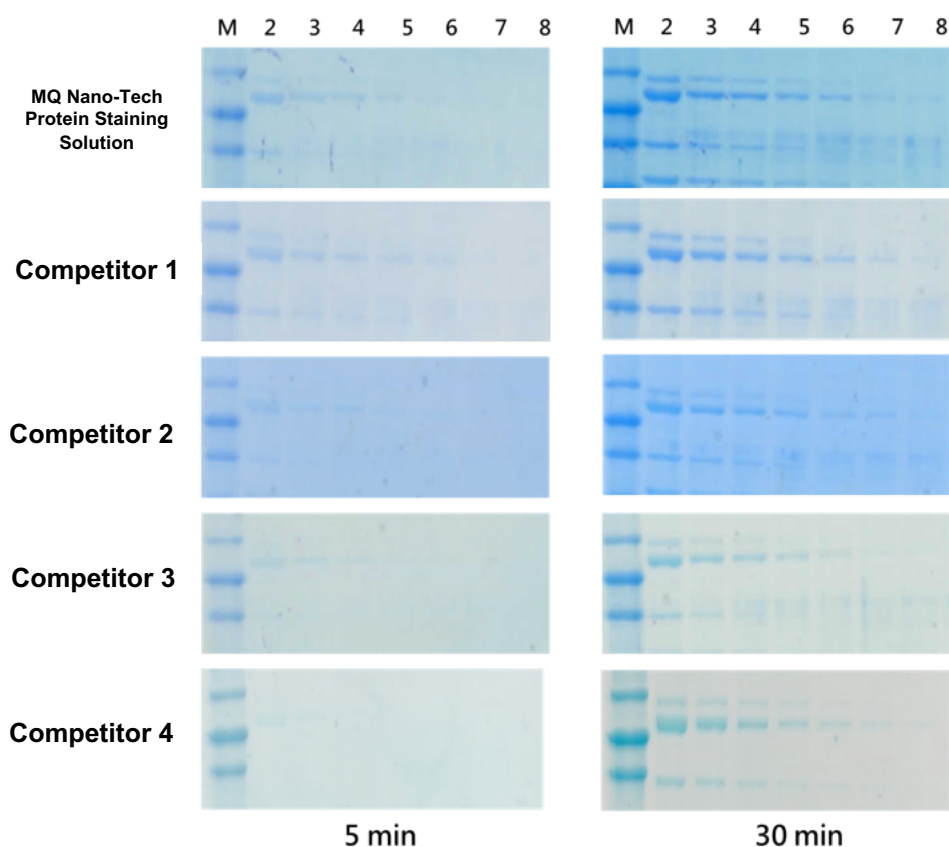
Lane H: BSA 10 ng

Lane I: BSA 5 ng

Lane M2: Prestained Protein Ladder

After running 10% homemade gel (0.75 mm thickness), please remove the gel from the cassette then proceed to submerge the gel in a proper amount of MQ Nano-Tech Protein Staining Solution, enough to cover the gel. Lightly agitate the staining container at room temperature when staining for 30 hrs.

Benchmark Against Other Brands



MQ Nano-Tech Protein Staining Solution presents the equivalent or even superior performance on fast signals and clear background compared with other brands. Lightly agitate the staining box for 5 to 30 minutes at room temperature.

Reagent Dilution

1. Prepare a 5L bottle.
2. Unpack PSS-M-5X-500 and pour the liquid content into the bottle.
3. Rinse residual reagent in the original bottle with deionized water.
4. Add deionized water until the volume reaches 5L.

Reaction Setup

1. Make 5X Concentrate MQ Nano-Tech Protein Staining Solution into 1X MQ Nano-Tech Protein Staining Solution.
2. Carefully mix 1X Solution up and down few times before use.
3. After SDS-PAGE has finished, remove the gel from the cassette and submerge it in the proper amount of MQ Nano-Tech Protein Staining Solution, enough to cover the gel. Lightly agitate the staining box for 10 to 30 minutes at room temperature.
4. As there is no need for washing or destaining, please continue to carefully remove the staining solution and rinse the excess stain in the gel with water.
5. Image the gel.

Important Points

- There is no risk of excessive staining. Instead, superior visibility per band is achieved when the gels are submerged overnight.
- Carefully mix MQ Nano-Tech Protein Staining Solution up and down few times before use.
- If the gel is thicker than mini-gel (1mm), it will take longer to incubate.
- The dye solution may contain blue clumps. This is normal and easily dissolved in distilled water.