40% Deionized Glyoxal Solution (TBS6023)

Description

40% Deionized Glyoxal Solution(6M) is designed for RNA denaturation compatible with all buffered agarose gels. Following electrophoresis, RNA can be visualized with Nucleic Acid Stain or ethidium bromide. Glyoxal denaturation make the band sharper than formaldehyde.

Highlights

- Formaldehyde-Free.
- Safer than formaldehyde.
- High sensitive.
- Easily perform on the batch top without fume hood.

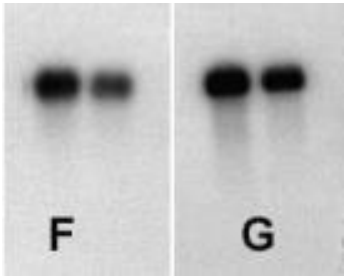

Fig1. Comparison of the formaldehyde (F) and glyoxal (G) RNA denaturing systems with Hybond-N+ nylon membrane.

Applications

- RNA denaturation for Northern Blot.

Content

- 40% Deionized Glyoxal Solution(6M): 0.4 mL.
- Shipment and Store at -80°C; Shelf-life: 1year after receipt.

Procedures

1. Prepare an agarose gel using 0.5X MOPS Buffer in the gel and running buffer.
2. Mix 40% Deionized Glyoxal Solution(6M) with DMSO, and RNA sample in a proper ratio. Mix briefly, then centrifuge to concentrate liquid at the bottom of the tube.
3. Heat the mixture for 15 minutes at 65°C.
4. Immediately chill on ice for 1 minute.
5. Centrifuge to concentrate liquid at the bottom of the tube.
6. Add suitable amount of loading buffer to per sample.
7. Load samples on gel and electrophorese as normal.
8. Following electrophoresis, the gel can be stained with either Nucleic Acid Stain or with ethidium bromide.

Here is an example for RNA denature preparation

Component	Volume (µL)	Final Concentration
RNA sample	X	
40% Deionized Glyoxal (6M)	4	1M
DMSO	12	50%
10 xMOPS	1.2	0.5x
RNase-free water	4.4-X	
Total volume (µL)	24	

Relative Products

1. TBS5018: 10x DNA loading Buffer
2. TBS5036: DEPE-treated water
3. TBS5041: MOPS Buffer (10x)
4. TBS6001: Cell RNA Isolation(200) Kit
5. 305-101: Hybrid-R (RNA isolation, Trizol+column)

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