

RNA MARKER 1000

Cat.n.	Product Name	Spec.
FS-RMW-1000	RNA Marker 1000	25 µL

Product Description/Introduction

RNA marker 1000 is a mixture of seven high-purified single-stranded RNA transcripts (in bases): 1000, 800, 600, 400, 300, 200 and 100 bases, obtaining by in vitro transcription. The RNA concentration of the product is about 700 ng/µL suitable for routine gel electrophoresis of RNA.

Storage and Shipping Conditions

Ship with dry ice; store at -80°C (short-term stored at -20°C), valid for 12 months.

Product Content

Components	FS-RMW-1000
RNA Marker 1000	25 µL
2×RNA Loading Buffer	100 µL

Assay Protocol / Procedures

Mix 1-2 µL of RNA Marker 1000 with 2×RNA Loading Buffer in equal volume ratios, incubate at 70°C for 10 minutes, immediately ice bath for 2 minutes, and add 0.5 µL of EB (0.5 mg/mL) (or Gel Red diluted 200x with 0.5 µL) for electrophoresis detection;

The recommended concentration of agarose in RNA formaldehyde agarose denatured gel is 3%, the concentration of formaldehyde is 18% (v:v), and the electrophoresis solution is 1×MOPS Buffer. Specific method for gel preparation (50 mL): weigh 1.5 g of agarose and add it to 36 mL of RNase free Water (use clean enzyme free water to moisten the conical flask). After heating and melting, add 5 mL of 10× MOPS Buffer. When the solution is cooled to not hot, add 9 mL of formaldehyde (37%), mix gently (no oil under light observation), pour the gel, and then gel at room temperature for 30 min ;

It is recommended to conduct low-temperature electrophoresis detection: place a clean electrophoresis tank in ice water for low-temperature electrophoresis, pour in an appropriate amount of precooled 1×MOPS Buffer (without gel), conduct electrophoresis at 5-10 V/cm (constant pressure) to an appropriate position, and observe with the gel imaging system. (Note: In addition to adding dye electrophoresis to the sample, gel impregnation after electrophoresis can also be used, but it is not easy to impregnate for too long).

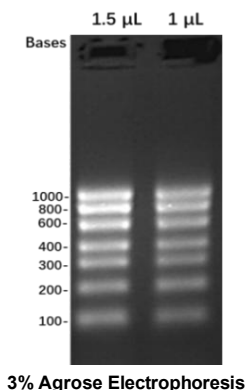
Note

To avoid RNA degradation, use protective gloves and prepare fresh gels and electrophoresis buffers just before use. Plastic ware, tips and solutions should be treated with diethyl pyro carbonate to prevent RNase contamination.

If higher quality electrophoresis results are required, the gel thickness can be appropriately reduced to meet the sample loading requirements; It is recommended to shake the electrophoresis chamber every 10 minutes during RNA marker electrophoresis.

RNA marker bands are quantitative reference of single-stranded linear RNA samples. For total RNA, it only can be used as a qualitative reference.

Aliquot the RNA marker, if necessary, to minimize freeze-thaw cycles.



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