



## Product Information

### RNA MARKER 0.28-6.6 KB

Product No. **R 7644**

#### Product Description

Suitable for use as a molecular weight marker for formaldehyde agarose gel electrophoresis.

**Usage:** 3  $\mu$ l per lane. See suitability assay for details. Sufficient for 25 uses.

**Storage:** -70 °C

**Storage Buffer:** 10 mM Tris-HCl, pH 8.0, 1 mM EDTA

**10X MOPS Electrophoresis buffer:** 400 mM MOPS, 100 mM sodium acetate, 10 mM EDTA

#### SUITABILITY ASSAY

RNA Marker sample solutions were prepared for electrophoresis as follows:

- 3  $\mu$ l RNA Marker
- 2  $\mu$ l RNA Sample Loading Buffer (Product No. R 4268) 62.5% Deionized Formamide, 1.14 M Formaldehyde, 1.25X MOPS-EDTA-Sodium Acetate Buffer (Product No. M 5755, diluted 1:8) 200  $\mu$ g/ml Bromphenol Blue 200  $\mu$ g/ml Xylene Cyanole 50  $\mu$ g/ml Ethidium Bromide.

The RNA marker sample solution was incubated at 65 °C for 5 minutes and immediately cooled on ice.

The entire 5  $\mu$ l of RNA Marker solution was run with appropriate RNA markers on a 10 mm thick denaturing (formaldehyde) agarose gel. Electrophoresis was performed in a mini submarine-type apparatus at 100 V for 2 hours in 1x MOPS electrophoresis buffer with buffer recirculation. The gel was stained in 5  $\mu$ g/ml ethidium bromide for 15 minutes and destained 1 hour with shaking in water. Nine bands were resolved and the band pattern was consistent with the sizes listed below.

#### FRAGMENT SIZES (bases)

6583	1383
4981	955
3638	623
2604	281
1908	

#### References

1. Sambrook, J., and Russell, D. W., *Molecular Cloning, A Laboratory Manual*, (Cold Spring Harbor Laboratory 2001) p. 7.31-7.34
2. Fasman, G.D., ed., *Practical Handbook of Biochemistry and Molecular Biology*, (CRC Press, 1986) p. 464.

JLL/JWM 2/04

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