

DNA-500

DNA-1000

DNA-2500

RNA

## Ladder Analysis Using the RNA Reagent Kit

The MCE-202 MultiNA is capable of detecting all 6 peaks originating from the ladder between 200 nt and 6000 nt with baseline resolution. The electropherogram peaks originating from the ladder are correctly assigned using a proprietary ladder peak detection algorithm.

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### Introduction

In RNA analysis using the MCE-202 MultiNA, 18S/28S identification and quantitation calculations requires the preparation of a size calibration curve by ladder analysis. Here we introduce an example of analysis using the RNA Reagent Kit.

### Results

The RNA 6000 Ladder consists of 6 RNA fragments from 200 nt to 6000 nt. Figure 1 shows the analysis results of the RNA 6000 Ladder using the MCE-202 MultiNA. The lower marker (LM) and 6 types of RNA were completely resolved. The results of automatic evaluation of the peaks from the ladder sample are annotated at the peaks' apexes in the electropherogram. All 6 peaks originating from the ladder are correctly assigned.

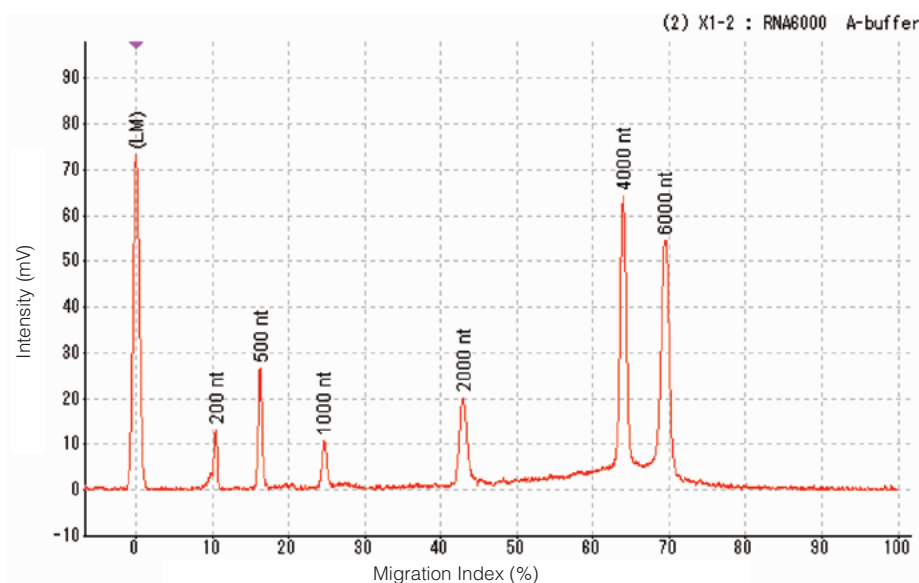


Fig. 1 Electropherogram of RNA 6000 Ladder Using the RNA Reagent Kit for MultiNA

## Analytical Conditions and Procedure

Instrument: MCE-202 MultiNA  
Analysis mode: RNA premix  
Sample: RNA 6000 Ladder  
Diluted 6:1 with THE RNA Storage Solution

### Reagents:

- RNA Reagent Kit for MultiNA (Shimadzu) P/N 292-27913-91
- SYBR® Green II nucleic acid gel stain (Invitrogen) S-7586
- UltraPure® Formamide (Invitrogen) 15515-026
- RNA 6000 Ladder (Applied Biosystems) AM-7152
- THE RNA Storage Solution (Applied Biosystems) AM-7001

### Experimental Method:

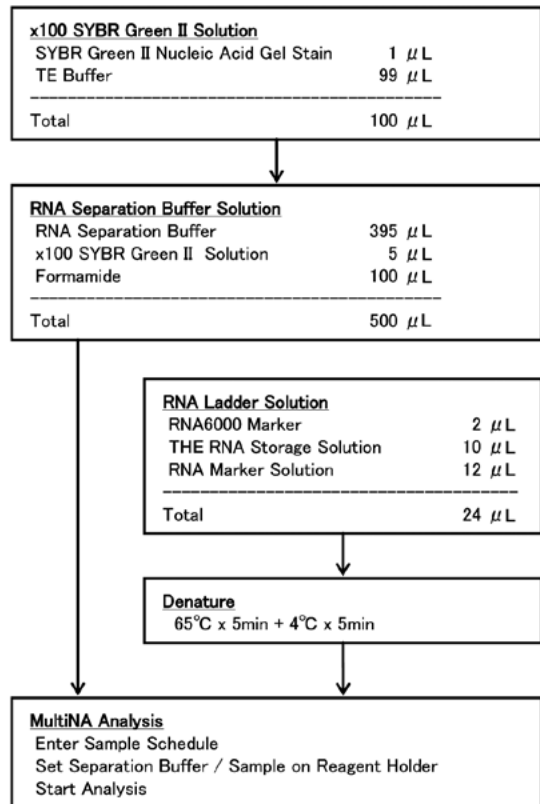


Fig. 2 Experimental Procedure (for 6 Samples)

(Note) For detailed operational information related to analysis using the MCE-202 MultiNA, please refer to the MCE-202 MultiNA Instruction Manual.



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