ProductInformation

18S + 28S Ribosomal RNA
From Calf Liver

Product No. **R0889**

Lot 051K1468
Store at –70 °C

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

Concentration: 2.0 mg/ml

STORAGE BUFFER
10 mM Tris, pH 8.0
1 mM EDTA

10X MOPS ELECTROPHORESIS BUFFER
400 mM MOPS
100 mM Sodium Acetate
10 mM EDTA

LOADING DYE
50 %(v/v)glycerol
1 mM EDTA
0.4 %(w/v) Bromphenol Blue
0.4 %(w/v) Xylene Cyanol

SUITABILITY ASSAY
E. coli 18S + 28S ribosomal RNA (rRNA) sample solutions were prepared for electrophoresis as follows:

1.0 µg 18S + 28S Ribosomal RNA
2.5 µl 10X Running Buffer
3.5 µl 37% Formaldehyde
10 µl Deionized Formamide
1 µl Ethidium Bromide (0.2 mg/ml)

SUITABILITY ASSAY(continued)
The above sample solution was incubated at 65 °C for 10 minutes and immediately cooled on ice. 2 µl of loading dye was added and the entire sample solution (1 µg 18S + 28S Ribosomal RNA) was run along with appropriate RNA markers on a denaturing (formaldehyde) agarose gel. Electrophoresis was performed in a submarine-type apparatus at 100 volts for 2 hours in 1X MOPS electrophoresis buffer with buffer recirculation. Two bands were resolved, and the sizes were consistent with 18S and 28S ribosomal RNA.

Fragment Sizes:
18S rRNA approx. 2000 bases
28S rRNA approx. 5300 bases

References:

1. Sambrook, J., et al., **Molecular Cloning, A Laboratory Manual**, Cold Spring Harbor Laboratory (1989), p.202.
2. Fasman, G.D., ed., **Practical Handbook of Biochemistry and Molecular Biology**, CRC Press, (1986), p.464.

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