



## Product Information

### **18S + 28S Ribosomal RNA From Calf Liver**

Product No. **R 0889**

Lot 032K0281  
Store at  $-70^{\circ}\text{C}$

#### **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  $\mu\text{g}$  18S + 28S Ribosomal RNA  
2.5  $\mu\text{l}$  10X Running Buffer  
3.5  $\mu\text{l}$  37% Formaldehyde  
10  $\mu\text{l}$  Deionized Formamide  
1  $\mu\text{l}$  Ethidium Bromide (0.2 mg/ml)

#### **SUITABILITY ASSAY(continued)**

The above sample solution was incubated at  $65^{\circ}\text{C}$  for 10 minutes and immediately cooled on ice. 2  $\mu\text{l}$  of loading dye was added and the entire sample solution (1  $\mu\text{g}$  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.