ssRNA Ladder Loading Buffer

1-800-632-7799
info@neb.com
www.neb.com

B0362S 001111014101

B0362S

0.4 ml ssRNA Loading Buffer (2X) Lot: 0011110

Store at –20°C **Exp: 10/14**

2X ssRNA Ladder Loading Buffer:
2X TBE (pH 8.3)
13% ficoll (w/v)
0.01% bromophenol blue
7 M urea

Note: Buffer **no** longer contains xylene cyanol ff.

Denaturing vs. Native Agarose Gels:
It is common practice to electrophorese RNA on a fully denaturing agarose gel, such as one containing formaldehyde (1).

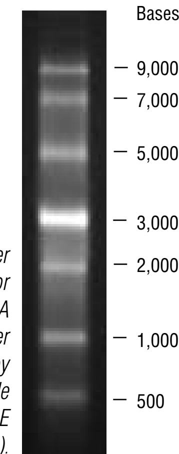
In many cases it is possible to run RNA on a native agarose gel and obtain suitable results. In fact, it has been demonstrated that treatment of RNA samples in a denaturing sample buffer maintains the RNA molecules in a denatured state, during electrophoresis, for at least 3 hours (2,3). The use of native agarose gels eliminates problems associated with toxic chemicals, and the difficulties encountered when staining and blotting formaldehyde gels.

Sample Preparation: This method utilizes the 2X ssRNA Ladder Loading Buffer provided, and samples should be run on a native gel prepared with 1X TBE. This method **does not** always denature RNA molecules completely.

1. Combine on ice:

ssRNA Ladder (500 µg/ml):	2 µl (1 µg)
H_2O (RNase-free):	3 µl
2X ssRNA Ladder Loading Buffer:	5 µl
	10 µl

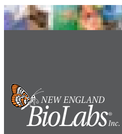
2. Heat at 65°C for 5 minutes, chill on ice, load entire sample on gel.



1 µg of ssRNA Ladder was heated at 60°C for 5 minutes in 1X ssRNA Ladder Loading Buffer and visualized by ethidium bromide staining (1.0% TBE agarose gel).

CERTIFICATE OF ANALYSIS

ssRNA Ladder Loading Buffer



1-800-632-7799
info@neb.com
www.neb.com

B0362S 001111014101

B0362S

0.4 ml ssRNA Loading Buffer (2X) Lot: 0011110

Store at –20°C Exp: 10/14

2X ssRNA Ladder Loading Buffer:
2X TBE (pH 8.3)
13% ficoll (w/v)
0.01% bromophenol blue
7 M urea

Note: Buffer no longer contains xylene cyanol ff.

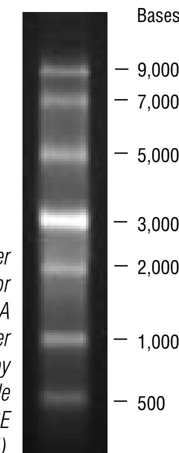
Denaturing vs. Native Agarose Gels:
It is common practice to electrophorese RNA on a fully denaturing agarose gel, such as one containing formaldehyde (1).

In many cases it is possible to run RNA on a native agarose gel and obtain suitable results. In fact, it has been demonstrated that treatment of RNA samples in a denaturing sample buffer maintains the RNA molecules in a denatured state, during electrophoresis, for at least 3 hours (2,3). The use of native agarose gels eliminates problems associated with toxic chemicals, and the difficulties encountered when staining and blotting formaldehyde gels.

Sample Preparation: This method utilizes the 2X ssRNA Ladder Loading Buffer provided, and samples should be run on a native gel prepared with 1X TBE. This method does not always denature RNA molecules completely.

1. Combine on ice:
ssRNA Ladder (500 µg/ml): 2 µl (1 µg)
H_2O (RNase-free): 3 µl
2X ssRNA Ladder Loading Buffer: 5 µl
10 µl

2. Heat at 65°C for 5 minutes, chill on ice, load entire sample on gel.



1 µg of ssRNA Ladder was heated at 60°C for 5 minutes in 1X ssRNA Ladder Loading Buffer and visualized by ethidium bromide staining (1.0% TBE agarose gel).

CERTIFICATE OF ANALYSIS