

Lonza Rockland, Inc. www.lonza.com biotechserv@lonza.com Tech Service: 800-521-0390 Customer Service: 800-638-8174 Document # 18123-0820-07 Rockland, ME 04841 USA

# RNA Markers 0.5–9 kbp

#### Introduction

RNA Markers consists of RNA transcripts from 0.5 kb to 9 kb, in sizes of 0.5, 1, 1.5, 2, 2.5, 3, 4, 5, 6, and 9 kb. The markers can be denatured with standard procedures, and visualized on Northern blots with labeled lambda RNA sequence. Markers are provided at a concentration of 1mg/ml. Ethidium bromide staining will easily detect 4µg of DNA on a standard agarose gel. Smaller quantities can be detected with GelStar<sup>®</sup> Nucleic Acid Gel Stain or SYBR<sup>®</sup> Green II Gel Stain.

#### Concentration

1.0 mg/ml

#### Storage Buffer

DEPC treated H<sub>2</sub>0/0.1 mM EDTA

#### Shelf Life

24 months at -80°C 6 months at -20°C

# **Quality Control**

 $2 \mu g$ - $4 \mu g$  ( $2 \mu l$ - $4 \mu l$ ) of RNA size standards will generate 10 distinct bands on a 1% denaturing agarose gel with ethidium bromide staining. The markers remain intact when incubated at 37°C overnight.

# Caution

This product is very sensitive to degradation by nucleases. Care should be taken to ensure that "finger" nucleases are not accidentally introduced. Use of diethyl pyrocarbonate (DEPC) – treated solutions and gloves is recommended. Clean gel apparatus by rinsing with 0.1% SDS or AccuGENE<sup>®</sup> 10% SDS Solution (Catalog No. 51213), followed by two rinses with nuclease – free water.

# **User Information**

These markers can be used by mixing 2  $\mu$ l-4  $\mu$ l of marker solution with your standard denaturing buffer, followed by denaturation with standard procedures. Gel parameters can greatly affect the appearance of these RNA markers. With less than optimal electrophoretic conditions, total RNA will look intact while the RNA markers may appear somewhat smeared. Optimal gel conditions include a freshly prepared denaturing gel utilizing high quality reagents. The gel should not become overheated during electrophoresis. We recommend 4 volts/cm as measured between electrodes and running the bromophenol blue to within 3 cm of the bottom of the gel. Overloading the markers will cause the marker bands to smear.

# **Ordering Information**

Catalog No.	Description	Size
50575	RNA Markers 0.5-9 kb	50 μl

# **Related Products**

GelStar<sup>®</sup> Nucleic Acid Gel Stain Latitude<sup>®</sup> HT Precast Agarose Gels Latitude<sup>®</sup> Precast Agarose Midigels Reliant<sup>®</sup> Gel System SYBR<sup>®</sup> Green Gel Stains SeaKem<sup>®</sup> LE Agarose SeaPlaque<sup>®</sup> GTG<sup>®</sup> Agarose SeaPlaque<sup>®</sup> Agarose

For more information contact Technical Service at (800) 521-0390 or visit our website at www.Lonza.com.

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