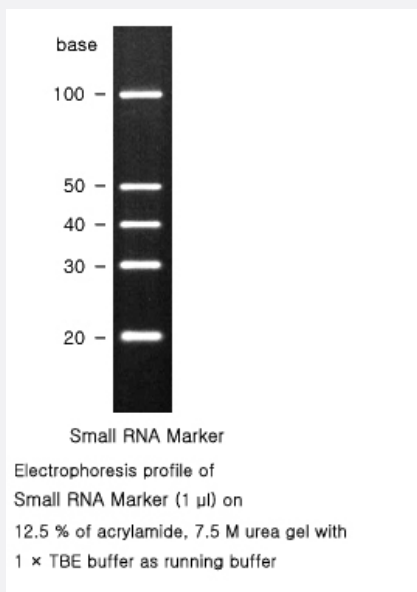


# Small RNA Marker

Catalog # R0007

Size 30 uL

## Applications



## Specification

### Product Description

The Small RNA Marker consists of five single-stranded RNAs (ssRNA). The 20, 30, 40 and 50 bases RNAs are synthesized by chemically (non phosphorylated). The 100 bases RNA is synthesized by in vitro transcription. The Small RNA Marker is suitable for determining size of small-size ssRNA in denaturing polyacrylamide gel electrophoresis. The Small RNA Marker can be visualized by ethidium bromide staining.

### Quality Control Testing

After 18 hrs incubation of the Small RNA Marker at 37°C, no visible degradation of the marker is observed in 12.5 % polyacrylamide / 7.5 M urea gel electrophoresis.

### Recommend Usage

1 uL/lane

### Storage Buffer

10 mM Tris-HCl (pH 8.0) buffer containing 1 mM EDTA (Ammonium acetate is slightly contained)

### Storage Instruction

Store at -80 °C. Repeated freeze/thaw cycles should be avoided.

**Note**

The Small RNA Marker is not prepared for estimating of RNA amount. RNA is very sensitive to degradation by nucleases. To avoid damaging the Small RNA Marker, use extreme care during manipulations to prevent nuclease contamination. Wear gloves and use clean apparatus. Glassware should be pretreated with diethyl pyrocarbonate (DEPC). Nuclease-free disposable plasticware should be used. Solutions and reagents to mix the marker should be high grade and nuclease-free. To use, thaw the Small RNA Marker on ice and keep it on ice while using.

## Applications

- Electrophoresis

## Publication Reference

- [The ubiquitin conjugase Rad6 mediates ribosome pausing during oxidative stress.](#)

Sezen Meydan, Géssica C Barros, Vanessa Simões, Lana Harley, Blanche K Cizubu, Nicholas R Guydosh, Gustavo M Silva.  
Cell Reports 2023 Nov; 42(11):113359.

Application: Electrophoresis, Yeast, Frozen yeast cell pellets

- [A TRIzol-based method for high recovery of plasma sncRNAs approximately 30 to 60 nucleotides.](#)

Kristen P Rodgers, Alicia Hulbert, Hamza Khan, Maria Shishikura, Shun Ishiyama, Malcolm V Brock, Yuping Me.  
Scientific Reports 2022 Apr; 12(1):6778.

Application: Electrophoresis

- [Normalized Ribo-Seq for Quantifying Absolute Global and Specific Changes in Translation.](#)

Katharina Hoerth, Sonja Reitter, Johanna Schott.  
Bio-Protocol 2022 Feb; 12(4):e4323.

Application: Electrophoresis

- [TEX15 is an essential executor of MIWI2-directed transposon DNA methylation and silencing.](#)

Theresa Schöpp, Ansgar Zoch, Rebecca V Berrens, Tania Auchynnikava, Yuka Kabayama, Lina Vasiliauskaitė, Juri Rappsilber, Robin C Allshire, Dónal O'Carroll.  
Nature Communications 2020 Jul; 11(1):3739.

Application: Func, Mouse, As a marker, Mouse foetal testes

- [SPOCD1 is an essential executor of piRNA-directed de novo DNA methylation.](#)

Ansgar Zoch, Tania Auchynnikava, Rebecca V Berrens, Yuka Kabayama, Theresa Schöpp, Madeleine Heep, Lina Vasiliauskaitė, Yuvia A Pérez-Rico, Atlanta G Cook, Alena Shkumatava, Juri Rappsilber, Robin C Allshire, Dónal O'Carroll.

Nature 2020 Aug; 584(7822):635.

Application: Func, Mouse, As a marker, Mouse foetal testes

- [Disome and Trisome Profiling Reveal Genome-wide Targets of Ribosome Quality Control.](#)

Sezen Meydan, Nicholas R Guydosh.

Molecular Cell 2020 Aug; 79(4):588.

Application: Func, As a marker

- [Evaluating bias-reducing protocols for RNA sequencing library preparation.](#)

Jackson TJ, Spriggs RV, Burgoyne NJ, Jones C, Willis AE.

BMC Genomics 2014 Jul; 15:569.

Application: Electrophoresis, Recombinant protein

- [Scalable transcriptome preparation for massive parallel sequencing.](#)

Stranneheim H, Werne B, Sherwood E, Lundeberg J.

PLoS One 2011 Jul; 6(7):e21910.

Application: Electrophoresis, Recombinant protein