

Description

synthetic

# microRNA Marker with Probe (LMP-1211)

Catalague No: LMP-1211 Lot No: 121001 Storage: -20°C

oligo-

microRNA Marker: 100 gel lanes – 12 μg (24 ng/μl)

Probe for Northern Blot (21 mer): 10 μg (20 ng/μl)

RNA

### 5'-AACTCTCAACCAGCCACTGCT-3'-Biotin

The probe has a free 5′ end, which can be labeled using  $\gamma$ -<sup>32</sup>P-ATP and a polynucleotide kinase. Use 1 to 10  $\mu$ l of Probe per 10 ml hybridization solution.

Exp:

**Supplied in:** microRNA Marker is provided in 4 M urea and 0.04% Orange G loading buffer. The Northern Blot probe is supplied in water.

# Usage Refe

The oligonucleotides can be used as size markers in polyacrylamide gels and Northern blots.

The microRNA Marker is a set of three

nucleotides (25, 21 and 17 residues long) without 5' phosphate groups. The sequences

25mer: 5'-AGAGCAGUGGCUGGUUGAGAUUUAA-3'

21mer: 5'-AGCAGUGGCUGGUUGAGAUUG-3'

17-mer: 5'-CAGUGGCUGGUUGAGAC -3'

single-stranded

of the oligonucleotides are:

The microRNA Marker is provided in a ready-to-load denaturing solution. Load 5-10  $\mu$ l if the gel is to be stained with methylene blue (Figure 1) or 3-5  $\mu$ l if stained with SYBR Gold. In Northern blots, less than 1  $\mu$ l (24 ng) is sufficient for detection by hybridization.

Orange G from the loading buffer migrates faster than the smallest band.

## **Northern Blots**

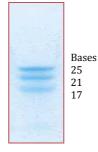
The three RNA marker oligonucleotides contain the same core sequence (in bold) so they can be detected by hybridization with the same probe. A 21-mer 3'-biotinylated DNA oligonucleotide probe complementary to the ladder sequences is included:

#### References

Sambrook, J. and Russel, D.W. (2001) *Molecular Cloning: A Laboratory Manual (3rd Ed.)*, 7.1-7.56

### **Related Products**

microRNA Marker (LMR-1210) siRNA Marker (LSR-1212)



# Figure 1

60 ng of microRNA Marker (5 µl) was loaded on a 12% native polyacrylamide gel which was stained with methylene blue for 5 minutes.