

microRNA Marker with Probe (LMP-1211)

<p>Catalogue No: LMP-1211</p> <p>microRNA Marker: 100 gel lanes – 12 µg (24 ng/µl)</p> <p>Probe for Northern Blot (21 mer): 10 µg (20 ng/µl)</p>	<p>Lot No: 121001</p> <p>Storage: -20°C</p> <p>Exp:</p>
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Description

The microRNA Marker is a set of three synthetic single-stranded RNA oligonucleotides (25, 21 and 17 residues long) without 5' phosphate groups. The sequences of the oligonucleotides are:

25mer: 5'-AGAGCAGUGGCUGGUAGAUUUUA-3'

21mer: 5'-AGCAGUGGCUGGUAGAUUG-3'

17-mer: 5'-CAGUGGCUGGUAGAC-3'

Usage

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

The microRNA Marker is provided in a ready-to-load denaturing solution. Load 5-10 µl if the gel is to be stained with methylene blue (Figure 1) or 3-5 µl if stained with SYBR Gold. In Northern blots, less than 1 µl (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:

5'-AACTCTCAACCAGCCACTGCT-3'-Biotin

The probe has a free 5' end, which can be labeled using γ -³²P-ATP and a polynucleotide kinase. Use 1 to 10 µl of Probe per 10 ml hybridization solution.

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.

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.