

Catalogue No: LSR-1212

siRNA Marker: 100 gel lanes – 9 µg (18 ng/µl)

Lot No: 121003

Storage: -20°C

Exp:

Description

The siRNA Marker is a set of three synthetic siRNA duplexes that are 25, 21 and 17 base pairs long with 2-base 3' overhangs (Figure 1). This marker may be used as an siRNA size standard on native polyacrylamide gels (Figure 2).

Recommended load: 2-5 µl/lane

Supplied in: 5% glycerol, 1mm EDTA and 0.008% Orange G.

Molecular Weight

The molecular weights of the supplied siRNA ladder duplexes are as follows:

25bp: 15,941g/ mol

21bp: 13,369 g/mol

17bp: 10,789 g/mol

25 mer:

5'-AUCGUCAAACACAGGCCACUGC UAA-3'
3'-UUUAGCAGUUUGUGUCCGGUGACGA-5'

21-mer:

5'-AUCUCAACCAGCCACUGC UAA-3'
3'-UUUAGAGUUUGGUCGGUGACGA-5'

17-mer:

5'-CUCAACCAGCCACUGC U-3'
3'-UAGAGUUGGUCGGUGAC-5'

Figure 1: Annealed siRNA duplexes.

Note

The duplexes share some sequence similarity, thus denaturation and reannealing will yield products of different sizes. For denaturing gels microRNA marker (SABio Cat. No. LMR-1210) is recommended.

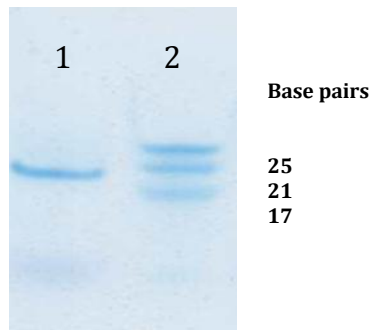


Figure 2. Lane 1: 45ng of a random 21bp siRNA duplex, annealed. Lane 2: 48 ng (2 µl) of siRNA Marker. The 12% non-denaturing polyacrylamide gel was subjected to electrophoresis and stained with methylene blue.

Note: Gel migration of a random siRNA duplex depends on its particular sequence (and hence its molecular weight), which may not exactly correspond to the siRNA ladder. The average MW of a 21bp siRNA duplex is approximately 13,300 g/mol.