3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

ProductInformation

123 BP DNA LADDER

Product Number **D 5042**
Storage Temperature 0 to –20 °C

Product Summary
Storage buffer: 10 mM Tris-HCl, pH 7.5, 50 mM NaCl, and 0.1 mM EDTA

Concentration: 0.8 to 1.2 µg/µl
See label for lot specific concentration.

Suitability Assay and Results
123 bp ladder was prepared for electrophoresis as follows:

0.5-2.0 µg 123 BP Ladder
2.5 µl Gel Loading Solution (Product No. G 2526)
(0.05% w/v bromophenol blue, 40% w/v sucrose, 0.1 M EDTA, pH 8.0)
Q.S. to 10 µl with 1X TE Buffer (10 mM Tris-HCl, pH approx. 8.0, 1 mM EDTA)

The above solution was loaded on 1.5% agarose (Product No. A 9539) submarine type minigel. The samples were run in 1X TAE (40 mM Tris-acetate, 1 mM EDTA, pH approx. 8.3) with appropriate DNA fragment size standards at 80 volts for 2 hours. After staining 15-20 minutes in 10 µg/ml ethidium bromide, the bands were clearly resolved and the pattern was consistent with the indicated fragment sizes.

Fragment Sizes: base pairs (bp)

123 to 4182 bp in crements of 123 bp

Notes:
1. Background can be reduced by destaining 30-45 minutes in 1X TAE.
2. The bromophenol blue tracking dye will migrate just ahead of the 492 bp fragment.
3. The 123 bp band will stain noticeably brighter than the other bands.

02/01