

Low DNA Mass Ladder

Cat. no. 10068-013

Size: 200 µl; 4 µl per application
Store at -20°C

Description

The Low DNA Mass Ladder is composed of an equimolar mixture of six blunt-ended DNA fragments of 2000, 1200, 800, 400, 200 and 100 bp. Electrophoresis of 4 µl of the Low DNA Mass Ladder results in bands containing 200, 120, 80, 40, 20, and 10 ng of DNA, respectively.

Storage Buffer

10 mM Tris-HCl (pH 7.5), 1 mM EDTA

Preparing the Ladder with Loading Dye

Mix four volumes of Low DNA Mass Ladder with one volume of gel loading buffer containing dye (e.g., 4 µl ladder with 1 µl dye). Then load the ladder/dye mixture on the gel.

The table on page 2 shows the appropriate volume of ladder to use to estimate the mass of unknown DNA samples. For reliable comparison of band intensities, the loading volume of the ladder should be the same as the volume of the experimental sample. Smaller volumes routinely give sharper bands. Do not heat the ladder before loading.

Note: The closer the size of the sample band relative to the band of comparable intensity in the Low DNA Mass Ladder, the more accurate the mass estimation will be.

Quality Control

Agarose gel analysis shows that all bands (2000, 1200, 800, 400, 200, 100 bp) are clearly distinguishable. Sharpness and relative intensity of the bands and the absence of background are evaluated relative to a control lot by agarose gel analysis.

Part no. 10068013.pps

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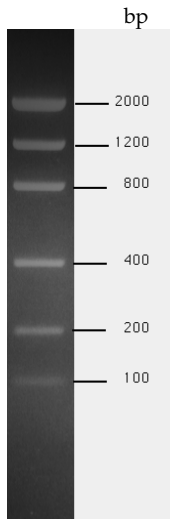


Table 1: Amount of DNA (ng) per band

The table below shows the amount of each DNA fragment in a given volume of ladder.

Note: The volumes in the table are for ladder only, not ladder plus dye; for example, if you loaded 4 μ l of ladder with 1 μ l of dye, use the values in the 4 μ l column.

Fragment size	Volume of Low DNA Mass Ladder		
	2 μ l	4 μ l	8 μ l
2000 bp	100 ng	200 ng	400 ng
1200 bp	60 ng	120 ng	240 ng
800 bp	40 ng	80 ng	160 ng
400 bp	20 ng	40 ng	80 ng
200 bp	10 ng	20 ng	40 ng
100 bp	5 ng	10 ng	20 ng

Figure: 2.0% agarose gel loaded with 4 μ l of Low DNA Mass Ladder stained with ethidium bromide.

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