



NZYDNA Ladder III

Catalogue numbers:

MB04401, 200 lanes

MB04402, 500 lanes

Description

NZYDNA Ladder III is a ready-to-use molecular weight marker, specially designed for easy size determination and DNA quantification. For best results using our ladder range we recommend using NZYTech agaroses.

Sizing

NZYDNA Ladder III produces a pattern of 14 regularly spaced bands, ranging from 200 to 10000 bp.

Quantification

When using the standard loading of 5 μ L per lane (714 ng of DNA) each band corresponds to a precise quantity of DNA (Figure 1).

Storage conditions

NZYDNA Ladder III should be stored at -20 $^{\circ}$ C until first use. Thereafter, the product can be stored at 4 $^{\circ}$ C for up to 6 months. Avoid multiple freeze thaw cycles, as these can damage the product.

Shipping conditions

The product can be shipped in a range of temperatures from dry ice to room-temperature.

Product life

The expiration date indicates the period of time over which NZYTech will guarantee 100 % effectiveness of this product if handled and stored under the recommended storage conditions.

Troubleshooting

Ladder is not sinking upon loading

Vortex briefly before loading

To prevent degradation as a result of DNase contamination after opening

Make aliquots with a small quantity of the ladder

Quality control assay

Nuclease assay

To test for DNase activity, 20 μ L of NZYDNA Ladder III are incubated for 14-16 hours at 37 $^{\circ}$ C and DNA integrity analysed through agarose gel electrophoresis.

Functional assay

5 μ L of NZYDNA Ladder III is loaded onto a 1% (w/v) agarose gel with TAE buffer and separated by electrophoresis to check the intensity and the pattern of bands. It is expected to observe 14 regularly spaced bands, as presented in Figure 1.

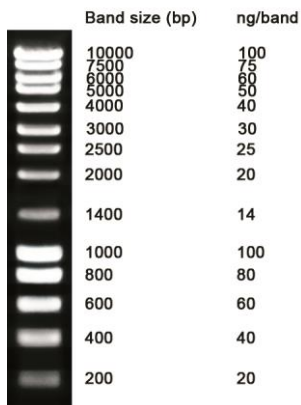


Figure 1. Precisely 5 μ L of NZYDNA Ladder III were electrophoresed in a 1% (w/v) electrophoresis grade agarose (MB027) gel. The gel was buffered with TAE (v/v) and stained with GreenSafe Premium (MB13201).

V2001

Certificate of Analysis

Assay	Result
Functional Assay	Pass
Nuclease Assay	Pass

Approved by:

Patricia Ponte
Senior Manager, Quality Systems

For research use only.

