

## NZYDNA Ladder VII

### Catalogue numbers:

MB14701, 200 lanes

MB14702, 500 lanes

### Description

NZYDNA Ladder VII 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 VII produces a pattern of 14 regularly spaced bands, ranging from 100 to 3000 bp.

### Quantification

When using the standard loading of 5  $\mu$ L per lane (850 ng of DNA) each band corresponds to a precise quantity of DNA (Figure 1).

### Storage conditions

NZYDNA Ladder VII should be stored at -20 °C until first use. Thereafter, the product can be stored at 4 °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

<b>Ladder is not sinking upon loading</b>
Vortex briefly
<b>To prevent degradation as a result of DNase contamination after opening</b>
Make aliquots with a small quantity of the ladder

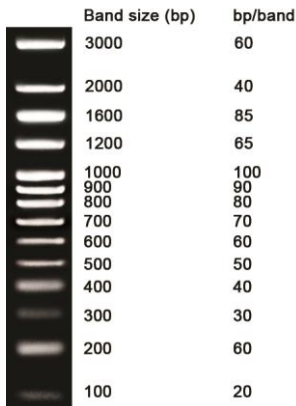
### Quality control assay

#### Nuclease assay

To test for DNase activity, 20  $\mu$ L of NZYDNA Ladder VII are incubated for 14-16 hours at 37°C and DNA integrity analysed through agarose gel electrophoresis.

#### Functional assay

5  $\mu$ L of NZYDNA Ladder VII is loaded onto a 1.5% (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  $\mu\text{L}$  of NZYDNA Ladder VII were electrophoresed in a 1.5% (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
Nuclease Assay	Pass
Functional Assay	Pass

Approved by:

Patrícia Ponte  
Senior Manager, Quality Systems

*For research use only.*



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