

CERTIFICATE OF ANALYSIS

**O'GeneRuler™
100bp DNA Ladder,
ready-to-use**

#SM1143 50µg (for 100 applications)

Lot:

Concentration: 0.1µg/µl

Supplied with: 1ml 6X Orange Loading Dye Solution

Store: at room temperature or at +4°C for periods up to 6 months.

For longer periods store at -20°C.

In total 2 vials.

Description

The O'GeneRuler™ 100bp DNA Ladder, ready-to-use, is designed for sizing and approximate quantification of wide range double-stranded DNA fragments on agarose and polyacrylamide gels. The ladder is composed of ten chromatography-purified individual DNA fragments (in base pairs): 1000, 900, 800, 700, 600, 500, 400, 300, 200, 100. It contains one reference band (500 bp) for easy orientation.

The ladder is ready-to-use – it is premixed with the 6X Orange Loading Dye Solution for direct loading on gel.

Storage and Loading Buffer

10mM Tris-HCl (pH 7.6), 10mM EDTA, 0.025% orange G, 0.005% xylene cyanol FF and 10% glycerol.

6X Orange Loading Dye Solution

10mM Tris-HCl (pH 7.6), 0.15% orange G, 0.03% xylene cyanol FF, 60% glycerol and 60mM EDTA.

QUALITY CONTROL ASSAY DATA

Well-defined bands are formed during agarose gel electrophoresis.

The DNA concentration is determined spectrophotometrically.

The absence of nucleases is confirmed by a direct nuclease activity assay.

Quality authorized by:



Jurgita Zilinskiene

Protocol for Loading

Step 1: Mix gently

Step 2: Load 1µl per 1mm gel lane

Recommendations

- Do not heat before loading.
- Dilute your DNA sample with the 6X Orange Loading Dye Solution (#R0631, supplied with the ladder): mix 1 volume of the dye solution with 5 volumes of the DNA sample;
- Load the same volumes of the DNA sample and the DNA ladder;
- For quantification, adjust the concentration of the sample to equalize it approximately with the amount of DNA in the nearest band of the ladder.
- Visualize DNA by staining with ethidium bromide or with SYBR® Green I.

PRODUCT USE LIMITATION.

This product is developed, designed and sold exclusively *for research purposes and in vitro use only*. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.

Please refer to www.fermentas.com for Material Safety Data Sheet of the product.

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IMPROVEMENTS

1. Amounts of DNA per band equalized for easier quantification.
2. 80 bp band is removed.
3. 1031 bp fragment replaced by 1000 bp.

