

CERTIFICATE OF ANALYSIS

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

#SM1563 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

O'GeneRuler™ Express DNA Ladder, ready-to-use, is designed for the fast sizing and quantification of DNA fragments under a wide range of electrophoresis conditions in agarose gels.

The band pattern is not affected by the composition of electrophoresis buffer, voltage and gel percentage.

The Ladder bands are easily separated in 5-10min at high voltage.

The Ladder is a mixture of nine chromatography-purified individual DNA fragments (in base pairs): 5000, 3000, 2000, 1500, 1000, 750, 500, 300, 100. It contains two reference bands (1500 and 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 gels.

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.

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 with 5 volumes of the DNA sample;
- Visualize DNA by staining with ethidium bromide or with SYBR[®] Green I.

QUALITY CONTROL ASSAY DATA

Well defined bands are formed in 5-10min during agarose gel electrophoresis.

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

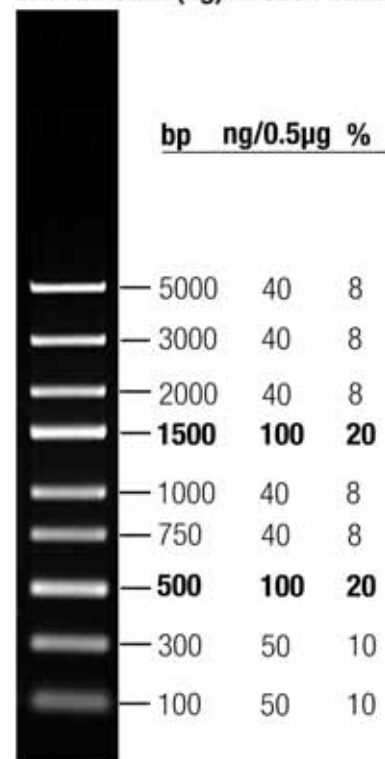
Quality authorized by:



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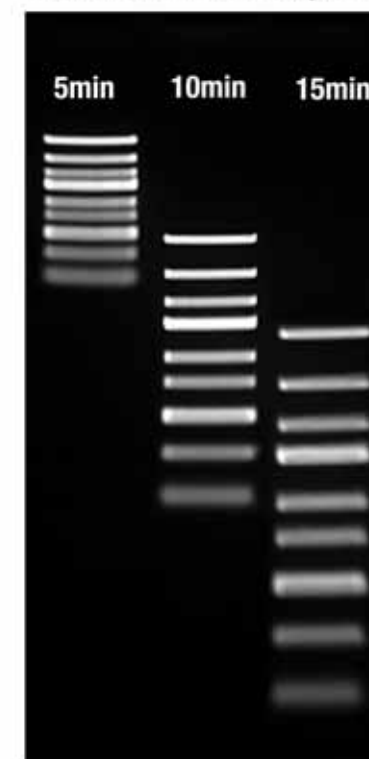
O'GeneRuler™ Express DNA Ladder, ready-to-use

DNA amount (ng) in each band



1% TopVision™ LE GQ Agarose (#R0491),
0.5µg/lane, 8cm length gel, 1X TAE, 7V/cm,
40min

Time course of band separation.



1% TopVision™ LE GQ Agarose (#R0491),
0.5µg/lane, 1X TAE, 23V/cm

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.