

# CERTIFICATE OF ANALYSIS O'GeneRuler<sup>TM</sup> Ultra Low Range DNA Ladder, ready-to-use

**#SM1223** 50 µg (for 100 applications) **Lot:** 

Concentration:0.1 μg/μlSupplied with:1 ml 6X Orange DNA Loading Dye

Store: at room temperature or at 4°C for up to 6 months. For longer periods store at -20°C.

In total 2 vials.

## Description

O'GeneRuler<sup>™</sup> Ultra Low Range DNA Ladder, ready-touse, contains a mix of 11 chromatography-purified individual DNA fragments (in base pairs): 300, 200, 150, 100, 75, **50**, 35, 25, 20, 15, 10. It contains 50 bp reference band for easy orientation.

The ladder is supplied in the storage and loading buffer and can be directly applied onto a gel.

It is specially designed for electrophoretic analysis of small DNA fragments on high percentage agarose (5%) and polyacrylamide (8-10%) gels.

## **Storage and Loading Buffer**

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

## 6X Orange DNA Loading Dye

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

## **Quality Control Assay Data**

Well-defined bands are formed during agarose gel electrophoresis.

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

## Quality authorized by:







# **RECOMMENDATIONS FOR USE**

- Vortex gently just prior to use;
- Do not heat before loading;
- Apply 1-2 μl (0.1-0.2 μg) of the DNA ladder per 1 mm of agarose or polyacrylamide gel lane width;
- Visualize the DNA bands by ethidium bromide staining.

### References

- 1. Stellwagen, N.C., Anomalous electrophoresis of deoxyribonucleic acid restriction fragments on polyacrylamide gels, Biochemistry, 22, 6186-6193, 1983.
- 2. Lane, D., et al., Use of gel ratardation to analyze protein nucleic acid interactions, Microbiological Reviews, 56, 509-528, 1992.
- 3. Stellwagen, N.C., Conformational isomers of curved DNA molecules can be observed by polyacrylamide gel electrophoresis, Electrophoresis, 21, 2327-2334, 2000.

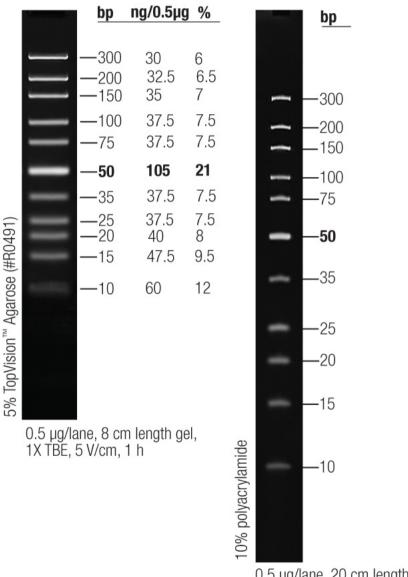
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### O'GeneRuler<sup>™</sup> Ultra Low Range DNA Ladder, ready-to-use



0.5 µg/lane, 20 cm length gel, 1X TBE, 8 V/cm, 3 h