

# Certificate of Analysis

## ExactMark 1kb DNA Ladder (250-10,000 bp), Ready to Use, 250µg

**C/No.** BIO-5140-250ug  
**Lot No.** 1A0212WG2146  
**Expiry Date** 11/2013  
**Concentration** 0.1µg/µl  
**Packaging** 5 X 50µg (500 applications)  
**Storage** 25°C – 6 months  
-20°C – 24 months

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### Description

Used for sizing and approximate quantification of wide range double-stranded DNA on agarose gel. The ladder is composed of thirteen individual DNA fragments (in base pairs): 10000, 8000, 6000, 5000, 4000, **3000**, 2500, 2000, 1500, **1000**, 750, 500, and 250. It contains two reference bands of 3000 and 1000bp for easy orientation. Bromophenol blue is used as tracking dye.

### Storage Buffer

10mM Tris-HCl (pH 8.0)  
1mM EDTA

### Quality Control Assay Data

Well-defined bands are formed upon running of agarose gel electrophoresis. The DNA concentration is determined with spectrophotometry. The absence of nucleases is confirmed by a direct nuclease activity assay.

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### Protocol for Loading

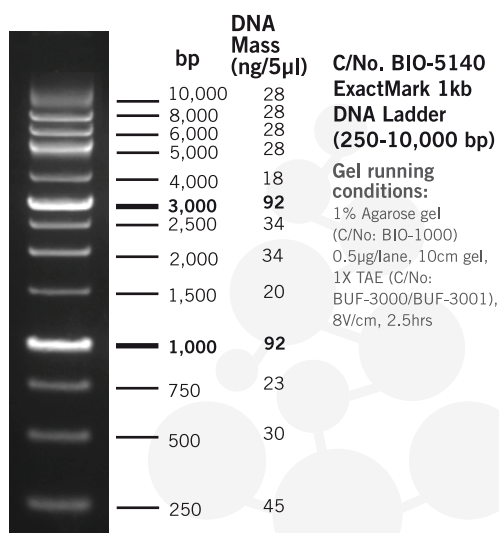
Load 5µl of the solution into a 5mm agarose gel lane.

It is recommended to load 1µl (0.1µg) of DNA ladder per 1mm of gel lane.

### Recommendations

- Do not heat solution prior to loading.
- Mix 1 part of dye solution with 5 parts of DNA sample.
- Load equivalent amount of DNA sample and ladder.
- Adjust sample concentration to be approximately equal to the amount of DNA in the nearest band of the ladder for quantification purpose.
- Visualize DNA by staining with FloroSafe DNA Stain (C/No: BIO-5170-1ml).

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