# **Product Information**

# ExactMark 1kb DNA Ladder (250-10,000 bp), Ready to Use, 50μg

C/No. BIO-5140-50ug
Concentration 0.1µg/µI

Packaging 1 X 50μg (100 applications)
Storage 25°C – 6 months
-20°C – 24 months



Page 1 of 4

#### 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-HCI (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.

Page 2 of 4

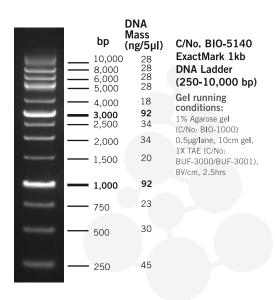
## Protocol for Loading

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

It is recommended to load  $1\mu\text{I}$  (0.1 $\mu\text{g})$  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).



Page 3 of 4 Page 4 of 4