# **EUROMEDEX**

**CERTIFICATE OF ANALYSIS** 

## 1kb DNA Ladder Plus

#03B-1411 250 (5x 50) μg (for 500 applications)

Lot Exp. date:

Concentration: 0.5µg/µl

Supplied with 2x 1ml 6X TriDye DNA Loading Solution

Store at -20°C.

In total 7 vials.

### Description

1kb DNA Ladder Plus is designed for the sizing and quantification of DNA fragments in agarose gels. The Ladder is composed of fifteen chromatography-purified individual DNA fragments (in base pairs): 20000, 10000, 7000, 5000, 4000, 3000, 2000, 1500, 1000, 700, 500, 400, 300, 200, and 75. It contains three reference bands (5000, 1500 and 500 bp) for easy orientation.

The Ladder is dissolved in TE buffer.

Storage Buffer (TE buffer) 10mM Tris-HCI (pH 7.6), 1mM EDTA.

## **6X TriDye DNA Loading Solution**

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

## Protocol for Loading

Loading mixture for the 5 mm agarose gel lane\*:

- DNA Ladder	1µl
<ul> <li>6X TriDye DNA Loading Solution</li> </ul>	1µl
- Deionized water	4µl
Total	6ul

Step 1: Mix gently

Step 2: Load on the gel

\*For gels with other lane widths, the components of the mixture should be scaled either up or down. Use 0.2µl (0.1µg) of DNA Ladder per 1mm of lane.

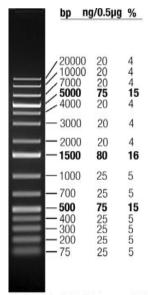
## Recommendations

- Do not heat before loading.
- Dilute your DNA sample with the 6X TriDye DNA Loading Solution (#10-0611, 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.
- For DNA band visualization with SYBR™ Green and other intercalating dyes, do not add the dyes into the sample, use gel staining after electrophoresis or include dyes into agarose gel

to avoid aberrant DNA migration.

• **Important note:** For DNA bands visualization with GelRed™ use gel staining after electrophoresis to avoid aberrant DNA migration.

### 1kb DNA Ladder Plus



1% TopVision™ LE GQ Agarose (#R0491), 0.5µg/lane, 8cm length gel, 1X TAE, 7V/cm, 45min **Note.** Formation of diffused bands of small DNA fragments is a feature of agarose gel electrophoresis.

#### **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

#### 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.

# **EUROMEDEX**

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