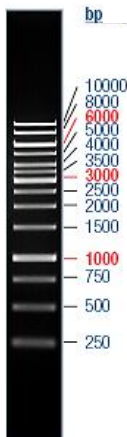


# 1 kb Ladder – Ready to Use (Ref. 31.013)

**Concentration: 0.1 mg/ml****Store at 4°C**

## Description

The 1 kb DNA Ladder is prepared from vector DNA digested to completion with appropriate restriction enzymes to yield bands ranging from 250 bp to 10 kb, suitable for use as molecular weight standards for agarose gel electrophoresis. The ladder is composed to 14 chromatography-purified individual DNA fragments (in base pairs): 10000, 8000, **6000**, 5000, 4000, 3500, **3000**, 2500, 2000, 1500, **1000**, 750, 500 and 250. The 1000, 3000 and 6000 bp fragments have increased intensity to serve as reference bands.



**1kb Ladder – Ready to use**  
0.5µg/lane  
1% agarose gel  
stained with ethidium bromide.

## Storage temperature

Store at 4°C

## Protocol

- 1- Load 5µl onto the agarose gel (1%)
- 2- Visualise DNA by staining with ethidium bromide or with SYBR® Green I.

The 1kb Ladder – Ready to Use was not designed for precise quantification of DNA mass, but can be used for semi-quantification (see Table 1). For quantification, adjust the concentration of the sample to equalize it approximately with the amount of DNA in the nearest band of the ladder.

**Table 1.** Percentage and mass of individual fragments for 5µl ladder 1Kb – Ready to use (0.5 µg)

Fragment	Size	%	mass (ng/0.5µg)
1	10000	6	30
2	8000	6	30
<b>3</b>	<b>6000</b>	<b>14</b>	<b>70</b>
4	5000	6	30
5	4000	6	30
6	3500	6	30
<b>7</b>	<b>3000</b>	<b>14</b>	<b>70</b>
8	2500	5	25
9	2000	5	25
10	1500	5	25
<b>11</b>	<b>1000</b>	<b>12</b>	<b>60</b>
12	750	5	25
13	500	5	25
14	250	5	25

### Notice to users

Research and *in vitro* use only.