



### 1. Product Description

The KAPA Express Ladder Kit is designed for fast determination of the approximate size and quantity of double-stranded DNA on agarose gel. KAPA Express Ladder kits contain seven DNA fragments (in base pairs): 100, 200, 400, 800, **1600**, 4000 and 8000. The KAPA Express Ladder contains one reference band (1600) for orientation. Kits are formulated with DNA loading dye for direct loading on agarose gel.

### 2. Product Features

- Ideal for fast gel electrophoresis
- Size determination of dsDNA on agarose gel
- Formulated with loading dye for direct loading on gel
- Stable at room temperature
- Reference band at 1600 bp for orientation

### 3. Product Specifications

#### 3.1 Concentration

50 ng/μl

#### 3.2 Storage and handling

Upon arrival, store kit components at room temperature or 4 °C for up to 6 months. Store at -20 °C for longer-term storage.

#### 3.3 Storage buffer

0.017% SDS, 10 mM Tris-HCl (pH 8.0), 10 mM EDTA, 0.021% Orange G, 0.004% xylene cyanol and 10% glycerol.

#### 3.4 DNA loading dye (6X)

0.1% SDS, 60 mM Tris-HCl (pH 8.0), 60 mM EDTA, 0.125% Orange G, 0.025% xylene cyanol and 60% glycerol.

#### 3.5 Quality control

The absence of nucleases is confirmed by agarose gel electrophoresis showing well defined bands and no degradation.

#### 3.6 Product Use Limitations

Kit components are sold exclusively for research purposes and *in vitro* use. Neither the product, nor any individual components, were tested for use in diagnostic applications or for drug development, nor is it suitable for administration to humans or animals. Please refer to the MSDS, available upon request.

**KK6304**

200 lanes, 5 μl/lane

**KAPA Express DNA Ladder Kit**

Contains:

- KAPA Express DNA Ladder (50 ng/μl) 1 x 1 ml
- KAPA Loading Dye (6X) 1 x 1.5 ml

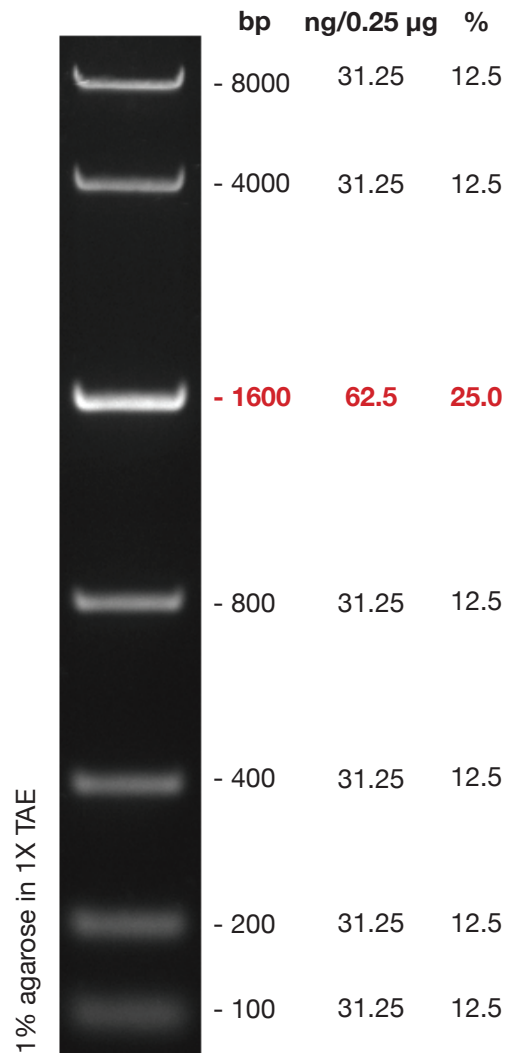
**KK6305**

1000 lanes, 5 μl/lane

**KAPA Express DNA Ladder Kit**

Contains:

- KAPA Express DNA Ladder (50 ng/μl) 5 x 1 ml
- KAPA Loading Dye (6X) 5 x 1.5 ml





## 4. Loading Protocol

1. If stored at -20 °C, mix gently after thawing
2. Load 5 µl per 1 mm gel lane

### Notes:

- Do not heat before loading
- Dilute DNA sample with the DNA Loading Dye (6X): mix 1 volume of the dye solution with 5 volumes of the DNA sample
- For quantification, load an amount of sample similar to the nearest band of the KAPA Express Ladder
- Visualize DNA by staining with ethidium bromide or with SYBR® Green I dye

For technical support please contact: [support@kapabiosystems.com](mailto:support@kapabiosystems.com)

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