

The DNA 100K kit is intended to determine the size profile of double stranded DNA samples in the 1 to 100 kb range with the Multi-channel BIABooster system. The kit is designed to analyse 40 samples and associated standards. The sensitivity and the sizing range of the method allow to fully characterise genomic DNA.

Kit Content

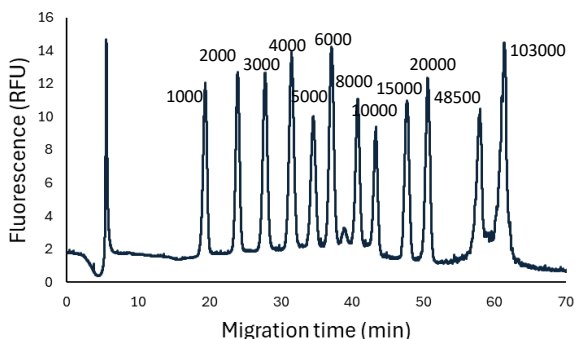


DNA 100K Kit (ref : 23-BBCNA-DNA100K)

- Running buffer DNA 100K, 40 mL
- Capillary conditioning solution, 20 mL
- Capillary washing solution , 20 mL
- Fluorescent dye, 5 tubes of 55 µL
- DNA100K ladder, 2 tubes of 2µL

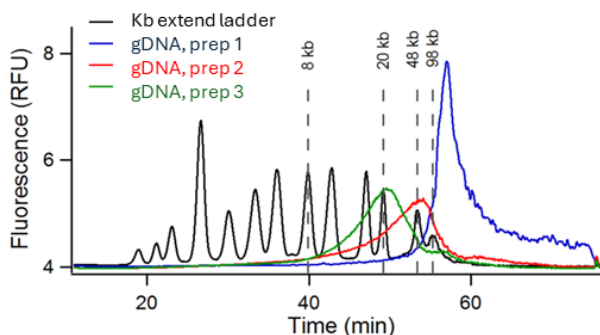
Large DNA separation

A reference ladder is analysed every 5 samples to convert the fluorescence trace into a profile giving mass concentration according to DNA size.



Standard ladder used in the DNA100K kit

The ladder is composed of 12 bands from 1000bp to 103000bp. The total concentration is 23 pg/µL.



Fluorescence profile of 3 different preparations of genomic DNA

Specifications

| | |
|-------------------------------------|---|
| Sample type | Double stranded DNA |
| Size range | 1 – 100 kbp |
| LOD ⁽¹⁾ | 50 pg/mL at 100 kbp; 20 pg/mL at 20 kbp |
| Sample volume | 10µL (1µL injected) |
| Sample salt concentration | up to 15mM |
| Sizing Accuracy | +/- 3% |
| Sizing Reproducibility | < 3% CV |
| Quantification Accuracy | +/- 20% |
| Quantification Precision | < 20% CV |
| Dynamic range ⁽²⁾ | 300 |

(1) *Limit of Detection: the concentration for a single fragment which gives a signal-to-noise ratio of 3 (peak height). For smears, the LOD is usually 20-50 times higher.*

(2) *Dynamic Range: ratio between the highest and the lowest concentrations giving a quantifiable result.*