

The DNA 1K kit is intended to determine the size profile of double stranded DNA samples in the 100 to 1500bp range with the Multi-channel BIABooster system. The kit is designed for 40 samples and associated standards. The sensitivity and the sizing range of the method allow to fully characterise purified DNA.

Kit Content

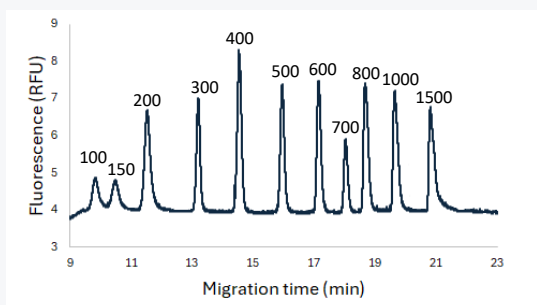


DNA 1K Kit (ref : 23-BBCNA-DNA1K)

- Running buffer DNA 1K
- Capillary conditioning solution
- Capillary washing solution
- Fluorescent dye
- DNA10K ladder

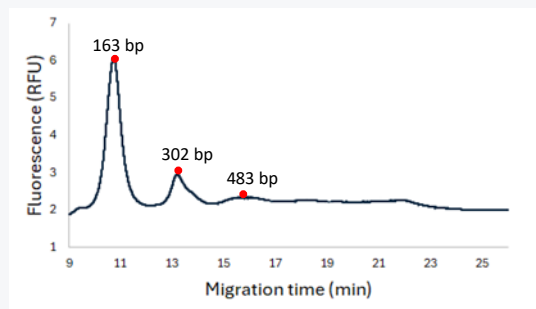
DNA separation

In each channel, 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 DNA1K kit

The ladder is composed of 11 bands from 100bp to 1500bp. The total concentration is 32 pg/μL.



Typical cfDNA size profile of a healthy donor

Specifications

Sample type	Double stranded DNA
Size range	0.1 – 1.5kb
LOD, standard method ⁽¹⁾	10pg/mL à 1kb et 100pg/mL à 100bp
LOD, multiple injection method ⁽¹⁾	1pg/mL à 1kb et 10pg/mL à 100bp
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⁾	1000

(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.