

PCR products length control

Determination of Oligonucleotides by Capillary Electrophoresis and Laser Induced Fluorescence Detection

Limit of Detection*:
32 ng/mL for 50 BP oligo

* Estimated for a S/N of 3

Instruments:

Capillary Electrophoresis: Agilent CE
Detector: Picometrics ZETALIF 2000 detector
Laser: Diode 650 nm, 15 mW (Laser head)

Samples:

- Standard oligonucleotides 50 to 500 Base Pairs (BP) (ALF Express Sizer, Amersham Pharmacia Biotech Ref. 27-4539-01). All Oligos diluted in Tris EDTA buffer, pH7.6

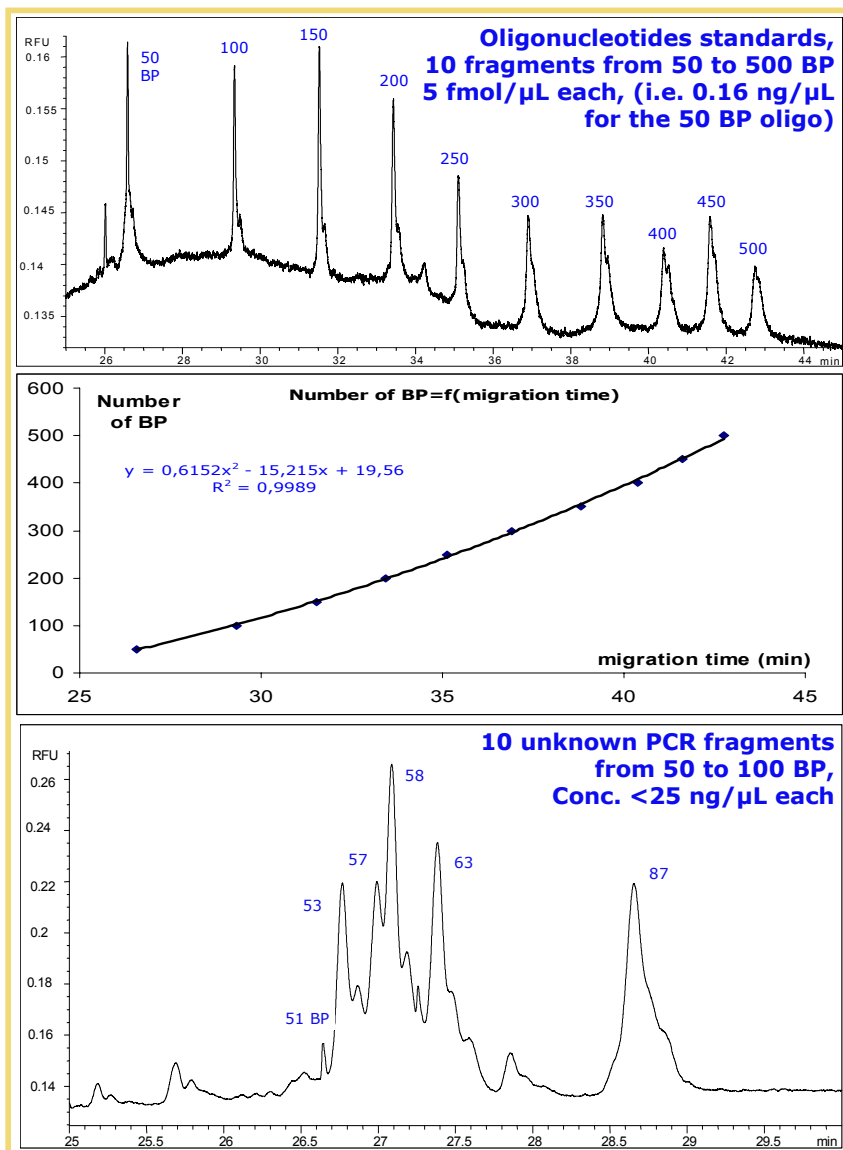
- Unknown PCR products 50 to 100 BP

Reagents:

Derivatization agent: CY5 dye, Amersham

Methods:

Capillary: CEP Coated capillary from Agilent Technologies 75 µm ID, 89 cm length (75 cm effective length), Temp. 20°C
Buffer: DNA buffer solution for HPCE (Agilent Technologies 8500-6784) and hydroxyethyl cellulose (3% w/v)
Voltage: -20 kV, (-30 µA)
Injection: - 8 kV, 5 seconds



Source: Picometrics application lab. 12/2001