

# PCR products length control

Application note Ref : AN 044-03A

## Detection of Oligonucleotides using 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 detector  
Laser: Diode 650 nm, 15 mW (Laser head)

**Samples:**

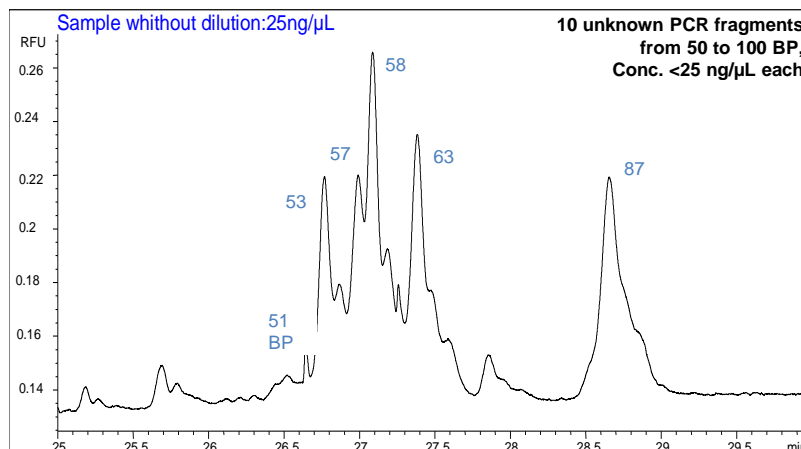
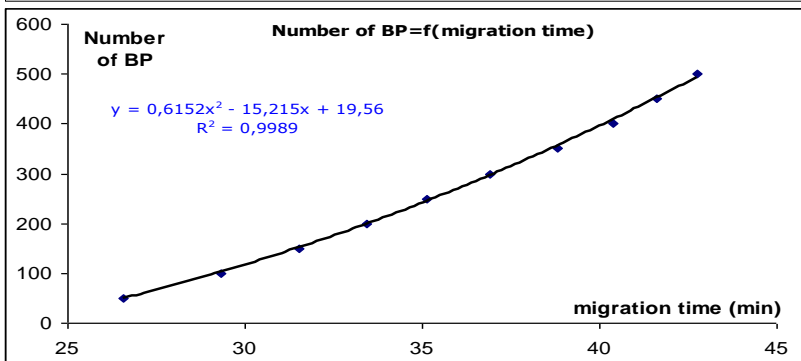
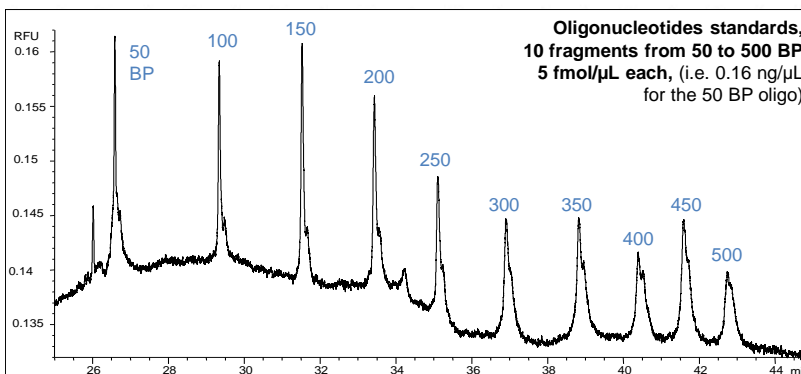
- Standard oligonucleotides 50 to 500 Base Pairs (BP) (ALF Express Sizer, Amersham Pharmacia Biotech Ref. 27-4539-01).  
All Oligos diluted in Tris EDTA buffer, pH7.6  
- Unknown PCR products 50 to 100 BP

**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 Laboratory 12/2001