



# **CE Oligonucleotide Size Standards**

**Catalog Number  
148-2014**

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4100078 Rev A

**BIO-RAD**

## **Description**

The CE Oligonucleotide Size Standard is used for checking operation of the BioFocus® capillary electrophoresis system and confirming performance of the CE Oligonucleotide Run Buffer and BioCAP™ oligonucleotide analysis Capillary. It is a lyophilized mixture of 13 synthetic single-stranded mixed-sequence oligonucleotides ranging in length from 8 to 32 bases (see Figure 1).

## **Preparation**

When reconstituted with 100 µl of water, the mixture contains approximately 14 µg/ml of each sequence in TBE buffer (25 mM Tris, 25 mM borate, 2 mM EDTA) and a total optical density of 5 A<sub>260</sub> units/ml.

## Use

The reconstituted standard can be used directly by pipetting 50  $\mu$ l of the solution into a 500  $\mu$ l sample vial. To avoid loss of solution which may be trapped in the top of the vial, centrifuge the standards for a few seconds in a microcentrifuge prior to opening. The reconstituted standards should be stored at 4 °C. For operating conditions of the BioFocus system, see Table 1, or consult the detailed instruction set for the CE Oligonucleotide Analysis Kit.

4 mer	GACT
6 mer	GACTGT
8 mer	GACTGACT
10 mer	GACTGACTGT
12 mer	GACTGACTGACT
14 mer	GACTGACTGACTGT
16 mer	GACTGACTGACTGACT
18 mer	GACTGACTGACTGACTGT
20 mer	GACTGACTGACTGACTGACT
22 mer	GACTGACTGACTGACTGACTGT
24 mer	GACTGACTGACTGACTGACTGACT
26 mer	GACTGACTGACTGACTGACTGACTGT
28 mer	GACTGACTGACTGACTGACTGACTGACT
30 mer	GACTGACTGACTGACTGACTGACTGACTGT
32 mer	GACTGACTGACTGACTGACTGACTGACTGACT

**Fig. 1. Sequences of the synthetic oligonucleotides in the CE Oligonucleotide Size Standard.**

**Table 1. Oligonucleotide Analysis Method**

ID: OLIGO	Description: oligonucleotide method
Prep 1: Pre-Inject from [OLIGO_PREP ] to [WASTE ]	120 sec
Prep 2: Pre-Inject from [OLIGO_DIP1 ] to [WASTE ]	0 sec
Prep 1: Pre-Inject from [OLIGO_DIP2 ] to [WASTE ]	0 sec
Polarity:	Negative -> Positive
Electrophoretic injection:	4 seconds
Inject voltage:	10.00 kV
Current limit:	50.00 $\mu$ A
Run voltage:	12.00 kV
Current limit:	50.00 $\mu$ A
Inlet buffer:	[OLIGO_RUN ]
Outlet buffer:	[OLIGO_RUN ]
Cartridge temperature:	40 °C
Run time:	14.00 min
Detector:	Single wavelength 260 nm
	Channel: 1
	Range: 0.0200
	Rise Time (sec): 1.0
	Lamp(s) remain on at the end of the run group

## Product Information

Catalog Number	Product Description
148-4140	<b>CE Oligonucleotide Analysis Kit</b>
148-5026	<b>CE Oligonucleotide Run Buffer</b>
148-2014	<b>CE Oligonucleotide Size Standards</b>
148-3080	<b>BioCAP Oligonucleotide Analysis Capillary, 2</b>
148-3052	<b>BioFocus User Assembled Cartridge</b>