



Product Data Sheet

Cat#: AD-108-U
Cat#: AD-108-B, Biotin labeled
Cat#: AD-108-F, FITC labeled

Product Description: Bisphenol A

Aptamer Type: DNA

Sequence: 5'-
GGGCCGTTTCGAACACGAGCATGCCGGTGGGTGGTCAGGTGGGATAGCGTTCCGCGTATGGCCCAGCGCATCACGGGT
TCGCACCAGGACAGTACTCAGGTCATCCTAGG-3'; 109-mer

Size 100 nM

Mol. Wt: 33800.83 g/mole

Purity: >95%

Affinity: 8.3 nM (reported value)

Comments: N/A

Notes: Using SELEX process, high affinity aptamers to BPA (environmental hormone) from a 10^{15} random library of 60 mer ssDNAs were isolated. The selected aptamers bound specifically to BPA, but not to structurally similar molecules, such as Bisphenol B with one methyl group difference, or 4,40-Bisphenol with 2 methyl groups difference. Using these, an aptamer-based sol-gel biochip was developed to detect BPA dissolved in water.

References: Jo et al. "Development of Single-Stranded DNA Aptamers for Specific Bisphenol A Detection." Oligonucleotides, 21(2011): 85-91.

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