

Product Data Sheet

Cat#: AD-141-U
Cat#: AD-141-B, Biotin labeled
Cat#: AD-141-F, FITC labeled

Product Description: Sialyllactose (SI-11)

Aptamer Type: DNA

Sequence: 5'-
GTACGAATTCACGAGGTTGCCAGCGGGGCCAGCCACTTCTGTCAGTGAATTCCTGCTCGTATATCTACTCGCCGCCTGCGAGCA
TGGAGTCGGATCCTCTA-3'; 102-mer

Size 100 nM

Mol. Wt: 31347.28 g/mole

Purity: >95%

Affinity: 4.9 μ M (reported value)

Comments: Except for the primer 1 region, thymidines contained an amino linker with terminal amine at the C5 position. This was an attempt to offset the repulsive force between the negatively-charged target and DNA backbone.

Notes: Sialyllactose-binding DNA aptamer was obtained from a library of modified DNA containing thymidine analogue bearing a positively charged amino group, which could enhance the binding with sialyllactose that contains a negatively charged carboxyl group. Sialyllactose is a ubiquitous component of the cell surface responsible for the infection of several viruses.

References: Masud, M, et al. "Sialyllactose-binding modified DNA aptamer bearing additional functionality by SELEX." *Bioorganic & Medicinal Chemistry*, 12 (2004): 1111-1120.

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