

## Product Data Sheet

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**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  $\mu$ 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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