

Product Data Sheet

Cat#: AD-138-U

Cat#: AD-138-B, Biotin labeled

Cat#: AD-138-F, FITC labeled

Product Description: Ramos Cells (TD05)

Aptamer Type: DNA

Sequence: 5'-AACACCGTGGAGGATAGTTCGGTGGCTGTTTCAGGGTCTCCTCCCGGTG-3'; 48-mer

Size 100 nM

Mol. Wt: 14847.64 g/mole

Purity: >95%

Affinity: 74.7 nM (reported value)

Comments: A modified/truncated version of TD05 exists: TD05.17. This version can be dimerized via a PEG linker to bind at physiological temperatures.

Notes: Ramos cells, a B-cell lymphoma cell line, were used as target cells for the generation of effective molecular probes. By taking advantages of the repetitive and broad enrichment strategy, the selected aptamers could bind to target cells and other closely related cell lines in variant patterns with an equilibrium dissociation constant (Kd) in the nanomolar range. Some aptamers could also specifically recognize the target lymphoma cells mixed with normal human bone marrow aspirates.

References: Tang et al. "Selection of Aptamers for Molecular Recognition and Characterization of Cancer Cells." Analytical Chemistry, 79(2007): 4900-4907.

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