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# Aptamer

National Cancer Institute

## Source

National Cancer Institute. *Aptamer*. NCI Thesaurus. Code C1749.

Double-stranded DNA or single-stranded RNA oligonucleotide sequences with the capacity to recognize target molecules with high affinity and specificity. Fundamentally distinct from antibodies, aptamers mimic their properties and have emerged as a promising class of molecules in both therapeutic and diagnostic formats. In having small size (8-15 kDa) relative to antibodies (150 kDa), aptamers are candidates for rapid tumor penetration and blood clearance.