

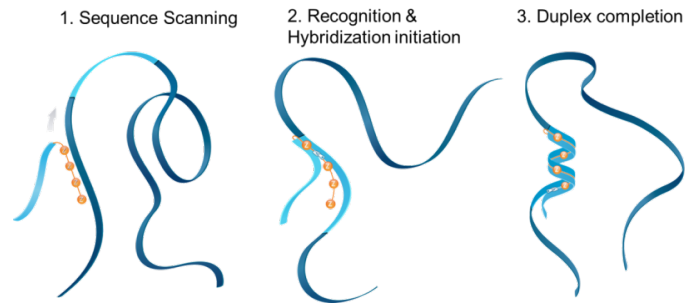
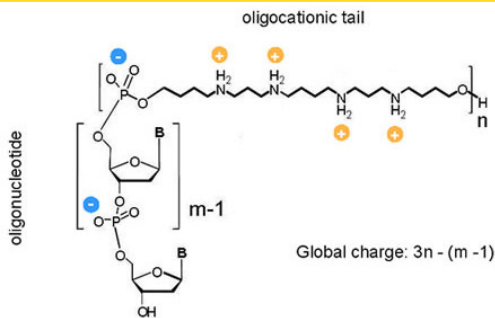
Modified oligonucleotides

Zip Nucleic Acids: ZNA[®]



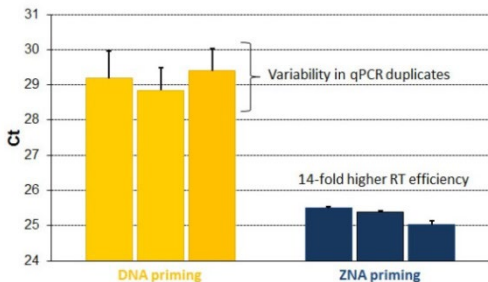
Improve your nucleic acids interaction with positively charged oligonucleotides

- ✦ High affinity oligonucleotides
- ✦ Adjustable and predictable T_m
- ✦ Fast binding to target sequence
- ✦ Efficient as PCR primers or probes
- ✦ Easy to design
- ✦ Improved RNA to cDNA conversion during Reverse Transcription



ZNA[®] structure. ZNA[®] are formed by conjugating spermine derivatives, as cationic moieties (Z units), to oligonucleotides. ZNA[®] show increased affinity for their targets by reducing the electrostatic repulsion between nucleic acid strands. These properties make ZNA[®] promising powerful tools for molecular biology and diagnostic applications.

3 steps mechanism to improve binding, affinity and kinetics. ZNA[®] enhance the affinity for their target by accelerating the complementary sequence recognition. ZNA[®] increase the binding and stabilize the formed duplex by reducing electrostatic repulsion, thereby increasing the T_m.



ZNA[®] primers improve the conversion of RNA to DNA. Conversion comparison of HMGA-2 transcripts to DNA obtained by RT of 200 ng of total RNA extracted from HeLa cells using 100 nM of standard DNA primer and ZNA[®] primer.

ZNA[®] is a licensing opportunity

For more information, contact our specialists at:
support@polyplus-transfection.com

Intellectual Property: ZNA[®] and their use are the subject matter of (i) U.S. Patent No. 9090648, U.S. Divisional Patent Application No. 14/745,871, European Patent No. 1 973 927 and foreign equivalents entitled "Cationic oligonucleotides, automated methods for preparing same and their uses" and (ii) U.S. Patent No. 8,465,920, European Patent No. 2 225 393 and foreign equivalents entitled "Methods for hybridizing nucleic acids".