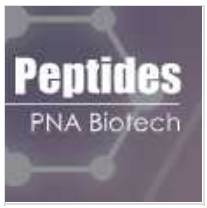


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# PNA/DNA Chimera Synthesis

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Pure PNA has significant binding properties, but it has completely different properties from DNA and RNA. For example, it cannot be recognized as a substrate when it interacts with nucleic acid modifying enzymes. On the one hand, this is an advantage, because it makes PNA very stable for the degradation of nucleases; but on the other hand, it also limits certain applications of PNA, such as not being used as a substrate for DNA polymerase, DNA kinase or DNA ligase. In one molecule, the combination of PNA and DNA can produce PNA/DNA chimeras with new properties. This substance significantly improves the solubility of PNA in aqueous solutions, PNA/DNA chimera can be analyzed and purified by PAGE and ion exchange chromatography because the DNA part is negatively charged. Interestingly, PNA/DNA chimeras also have biological functions, such as being used as primers for DNA polymerases or binding to RNA to mediate the dissociation of RNase H. Finally, the study of PNA/DNA chimeras can provide useful information about the structural and functional properties of DNA and RNA themselves.

**Creative Peptides** provides PNA/DNA chimera related services, we can provide design and synthesis integrated services, and committed to helping you solve synthesis problems and customize high-stability, multi-type PNA/DNA chimera products.

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https://pna.creative-peptides.com/services/pna-dna-chimera-synthesis.html

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