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Z-DNA

National Cancer Institute

Source

National Cancer Institute. Z-DNA. NCI Thesaurus. Code C13287.

Z-DNA can be obtained for certain sequences such as CGCGCG by increasing the salt concentration of the solution containing the sample to 4 molar NaCl. Z-DNA is lefthanded and the thinnest & tallest with a diameter of about 18 Angstrom. The sugar pucker is both C(3')-endo and C(2')-endo. In Z-DNA, the Watson-Crick base pairs are perpendicular to the helix axis. When examined from the top of the helix, bases are present throughout the matrix of the helix with no exclusive domains for either the bases or the backbone. At times the sugar phosphate backbone travels very close to the center of the helix, and the bases to the very edge of the helix.