Microscopic understanding of the conformational features of a protein–DNA complex[†]

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Fig. SI-1 Schematic representation of purine and pyrimidine nucleotides with IUPAC nomenclature of the individual atoms. The five endocyclic torsional angles (v_i with i = 0 to 4) of the sugar moiety are C4'-O4'-C1'-C2'; O4'-C1'-C2'-C3'; C1'-C2'-C3'-C4'; C2'-C3'-C4'-O4'; and C3'-C4'-O4'-C1', respectively, while the glycosidic torsion angles (χ) are O4'-C1'-N9-C4 (purine) and O4'-C1'-N1-C2 (pyrimidine). The angle ζ associated with the backbone phosphate group of the nucleotide is C3'-O3'-P-O5'.