

SUPPLEMENTARY FIGURES

Figure S1. Validation of DNA-PNA Interaction

Figure S2. Demonstration of Nuclease Resistance of PEI-DP3 Vehicle

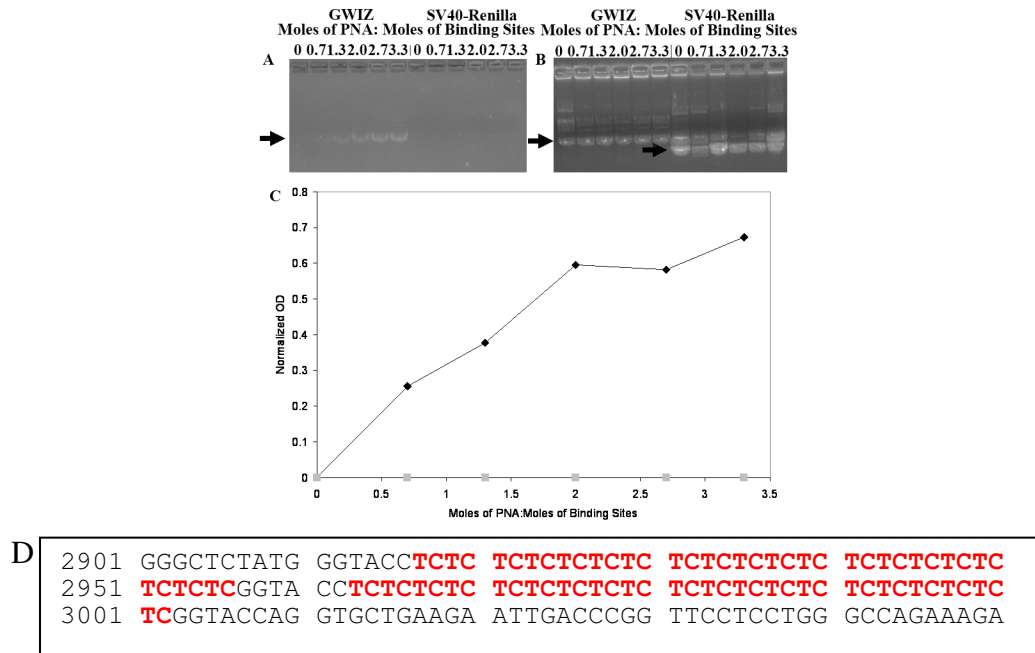


Figure S1 – DNA-PNA Conjugation. GWiz (PNA-binding) plasmid DNA (part number P040400, Genlantis) and SV40 Renilla (non-PNA-binding) plasmid DNA were incubated with AF-PNA and analyzed by agarose gel electrophoresis. Colocalization of AF-PNA and DNA was determined by comparison of the AF-stained bands (A) with the ethidium bromide-stained bands (B) for both plasmids. The supercoiled bands of the plasmids are indicated by arrows. The optical densities (OD) of the supercoiled bands were analyzed with ImageJ (city, state); the data in (C) represent the band intensity ratios (AF:ethidium bromide) at various molar incubation ratios for both the GWiz plasmid (black diamonds) and the SV40 Renilla plasmid (grey squares). (D) The sequence of the PNA-binding region of the GWiz plasmid. The exact PNA-binding segments are highlighted in red.

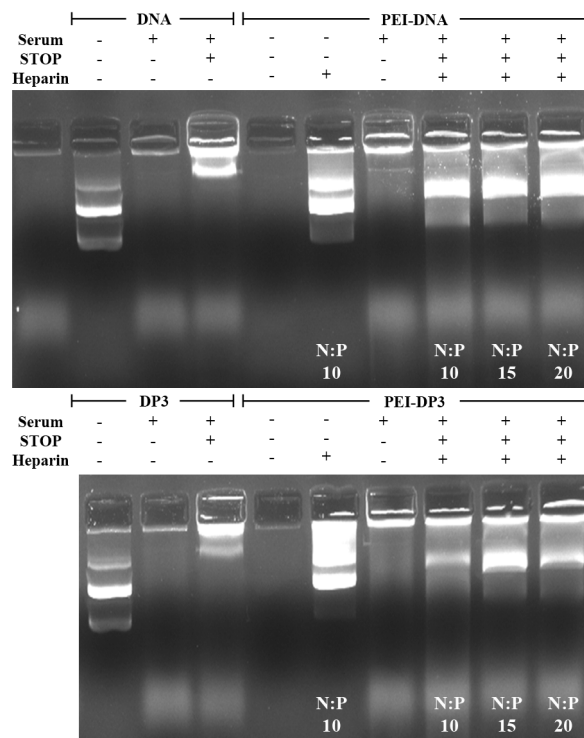


Figure S2 – Nuclease Stability Assay of PEI-DP3 Complexes. The indicated samples of the DP3 conjugates and the PEI-DP3 complexes were sequentially incubated with buffers containing (+) mouse serum, STOP buffer, and heparin or with buffers absent of these reagents (-). The samples were subsequently analyzed by agarose gel electrophoresis.