

Attachment of hybridizable oligonucleotide to silica support and its application for selective extraction of unmodified and antisense oligonucleotides from serum samples

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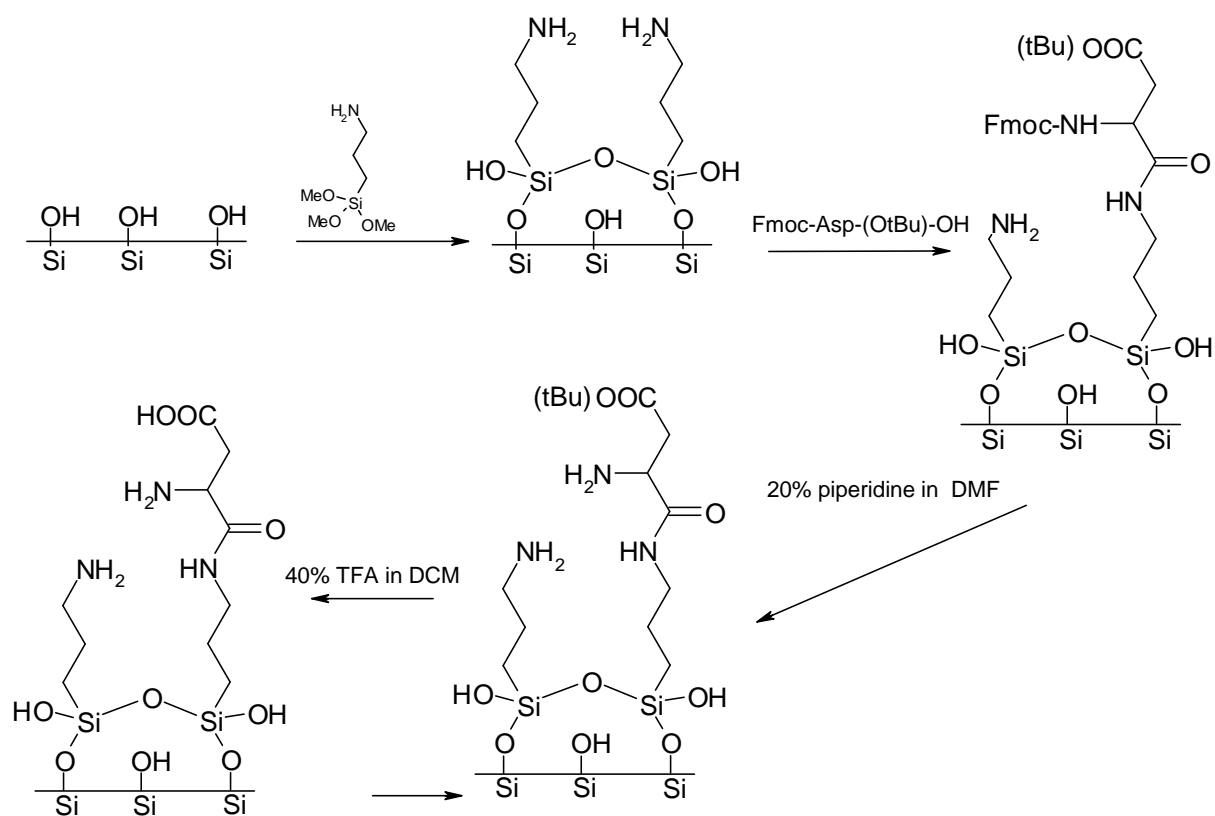


Figure S1. Schematic synthesis process of Si-ASP adsorbent.

Table S1. The table presenting final overall procedure.

Synthesis	2 mg of Si-ASP, 15 mg of EDC, 40 μ L of 100 μ M DNA1 in 200 μ L of 0.1 M MES (pH 4.5), 1 hour at 30 °C, centrifugation at 11000G, 15 minutes
Washing	two portions of 200 μ L 3.3 \times SSC, mixing, centrifugation at 11000G, 15 minutes
Adsorption	2 mg Si-DNA and 10 μ M DNA1 in 3.3 \times SSC (total volume 200 μ L) during 40 minutes at 30 °C, centrifugation at 11000G, 15 minutes
Washing	two portions of 200 μ L 3.3 \times SSC, mixing, centrifugation at 11000G, 15 minutes
Desorption	200 μ L of water at 80°C for 1 hour, centrifugation at 11000G, 15 minutes

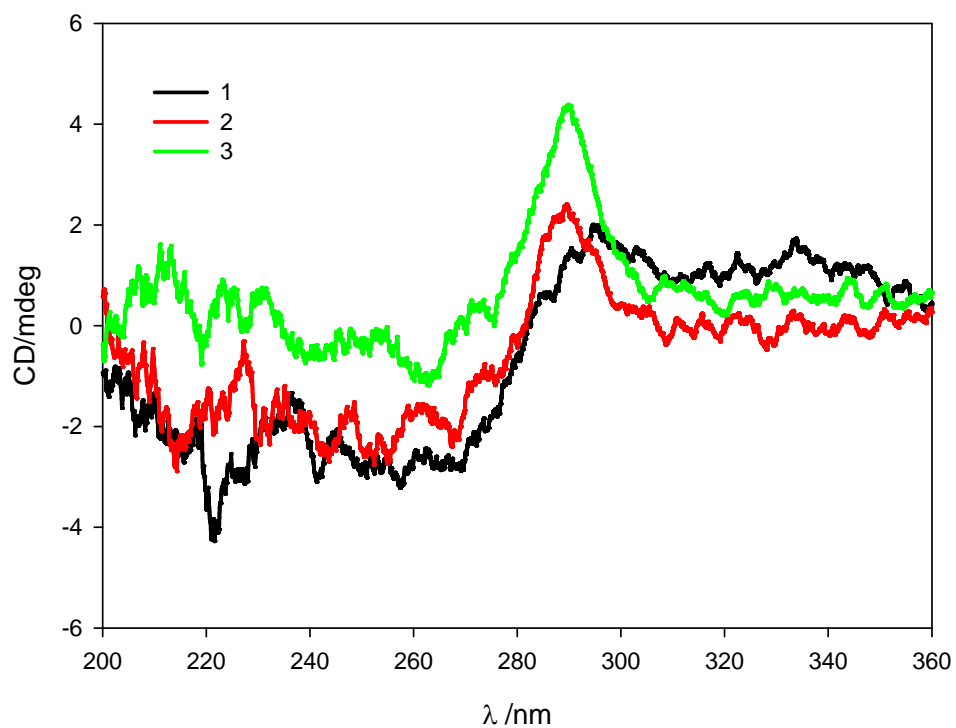
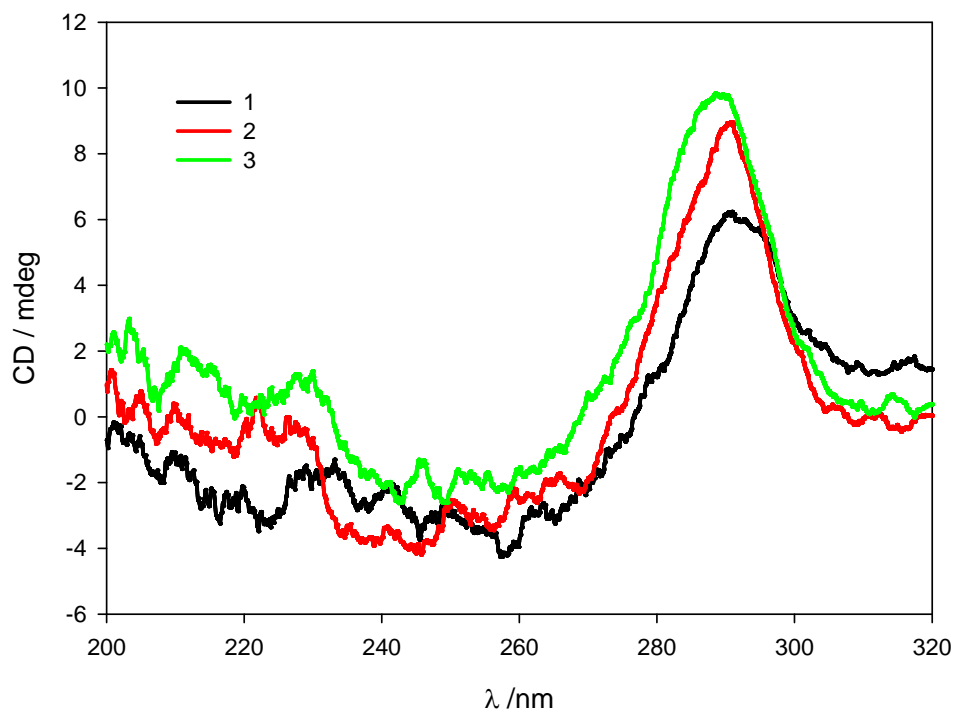


Figure S2. CD spectra of DNA (1,2) and DNA1 (3) oligonucleotides (1 μ M). The spectra were measured in 100 mM MES buffer, pH 4.5 with ECD (1) and 0.5 M NaCl with 50 mM citrate buffer (2,3) at 25 °C (upper panel A) and 95 °C (lower panel B) (see 2.2 section for experimental details).

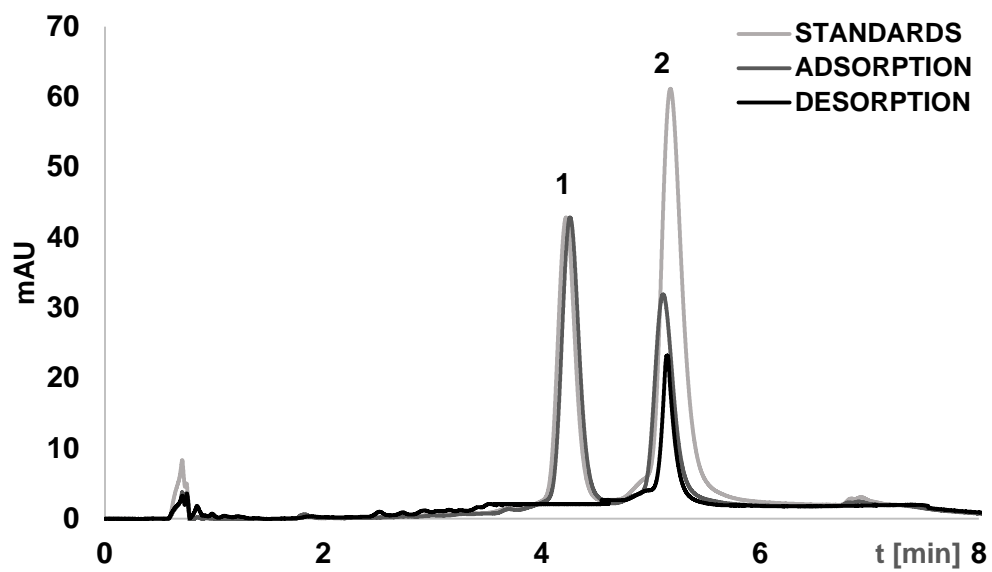


Figure S3. The chromatograms showing separation of DNA1 (2) and OL1 (1) mixture from the adsorption/desorption studies at Si-DNA (for chromatographic conditions see 2.2 experimental section).