Supporting Information

Simple and efficient room-temperature release of biotinylated nucleic acids from streptavidin

and its application to selective molecular detection

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(Note: For all Supplementary Figures, lanes numbered in red were not shown in the manuscript, but may have been used in quantitative analyses)

Figure S1. Lane 1: 1 kb ladder; Lanes 2-5: lanes shown in Figure 1c (left); Lanes 6-7: not used in manuscript.
Figure S2. Lane 1: 1 kb ladder; Lanes 2-4: not used in manuscript; Lanes 5-6: lanes shown in Figure 1c (right)
Figure S3. The three gels used in the quantification of phenol titration gel in Figure 2. Data not shown in the manuscript was still used for quantification. **UL**: Lane 1: 1 kb ladder; Lane 2: 150 bp biotinylated DNA; Lane 3: 150 bp biotinylated.
DNA+MS; Lanes 4-10: 150 bp biotinylated DNA+MS incubated with phenol at concentrations (v/v) of 25%, 12.5%, 6.3%, 3.1%, 1.6%, 0.8%, and 0%; **UR:** Lane 1: 1 kb ladder; Lane 2: 150 bp biotinylated DNA; Lane 3: 150 bp biotinylated DNA+MS; Lanes 4-9: 150 bp biotinylated DNA+MS incubated with phenol at concentrations (v/v) of 25%, 12.5%, 6.3%, 3.1%, 1.6%, and 0%. These lanes were used as exemplary data in Figure 2, top. Lane 10: not used in manuscript; **Bottom:** Lane 1: 1 kb ladder; Lane 2: 150 bp biotinylated DNA; Lane 3: 150 bp biotinylated DNA+MS; Lanes 4-9: 150 bp biotinylated DNA+MS incubated with phenol at concentrations (v/v) of 25%, 12.5%, 6.3%, 3.1%, 1.6%, and 0%.
Figure S4. Lane 1: 1 kb ladder; Lanes 2-6: data shown in Figure 3
Figure S5. Lane 1: 1 kb ladder; Lane 2: Unmodified λ-phage DNA; Lane 3: Unmodified λ-phage DNA + PspXI;

Lanes 4-6: data shown in Figure 4b