



**Supplementary Figure 1.** Evaluation of nanobarcode with agarose gel electrophoresis. **(a)** Evaluation of DNA nanobarcode with 3% (w/v) agarose gel electrophoresis. Lane 1 is a starting oligonucleotide component (30-mer); lanes 2, 3, 4, 5, 6 are nanobarcode 4G1R, 2G1R, 1G1R, 1G2R, 1G4R, respectively. **(b)** Evaluation of denatured DNA nanobarcode with 3% (w/v) agarose gel electrophoresis. Lanes 1 and 2 are starting oligonucleotide components (30-mer and 42-mer) as molecular weight markers. Lanes 3, 4, 5, 6, 7 are denatured 4G1R, 2G1R, 1G1R, 1G2R, 1G4R, respectively. Schematic drawings of denatured nanobarcode are shown in **Supplementary Figure 2**.