Supporting Information

Enhanced DNA capture rate in silicon nitride nanopore using localized photothermal heating field

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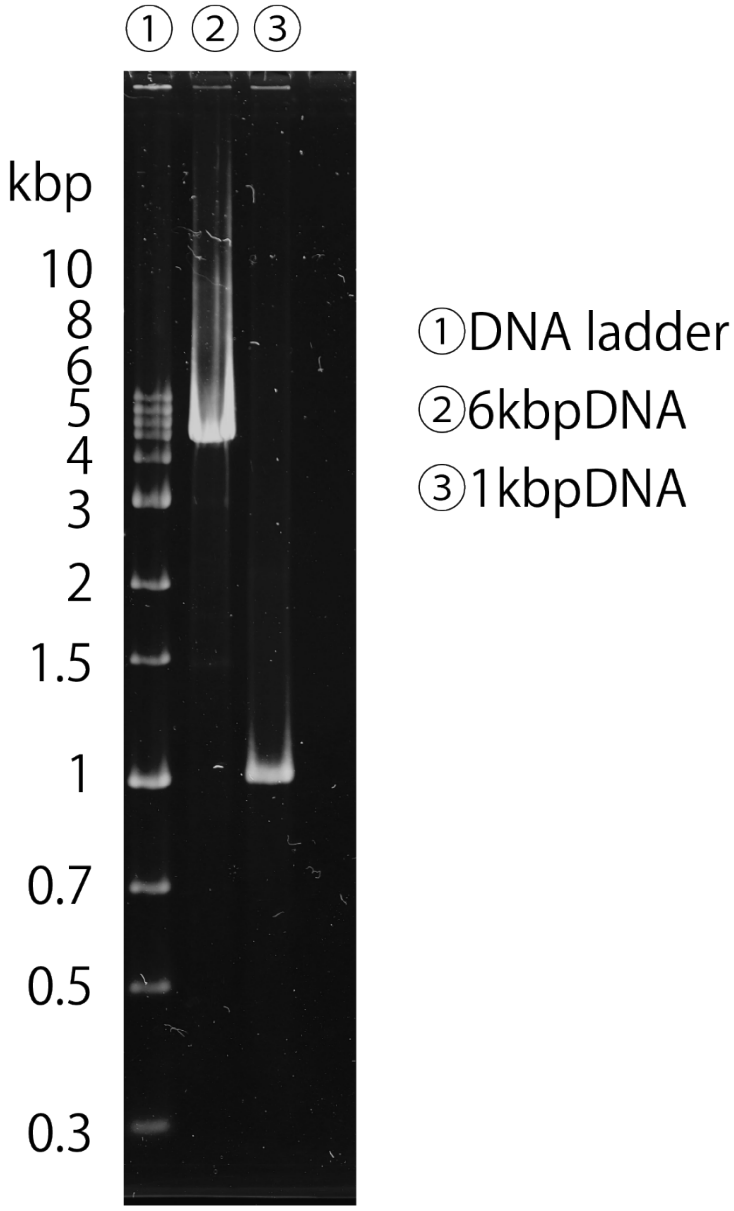

Figure S1 Agarose gel image of 6kbp and 1kbp dsDNA prepared by PCR.

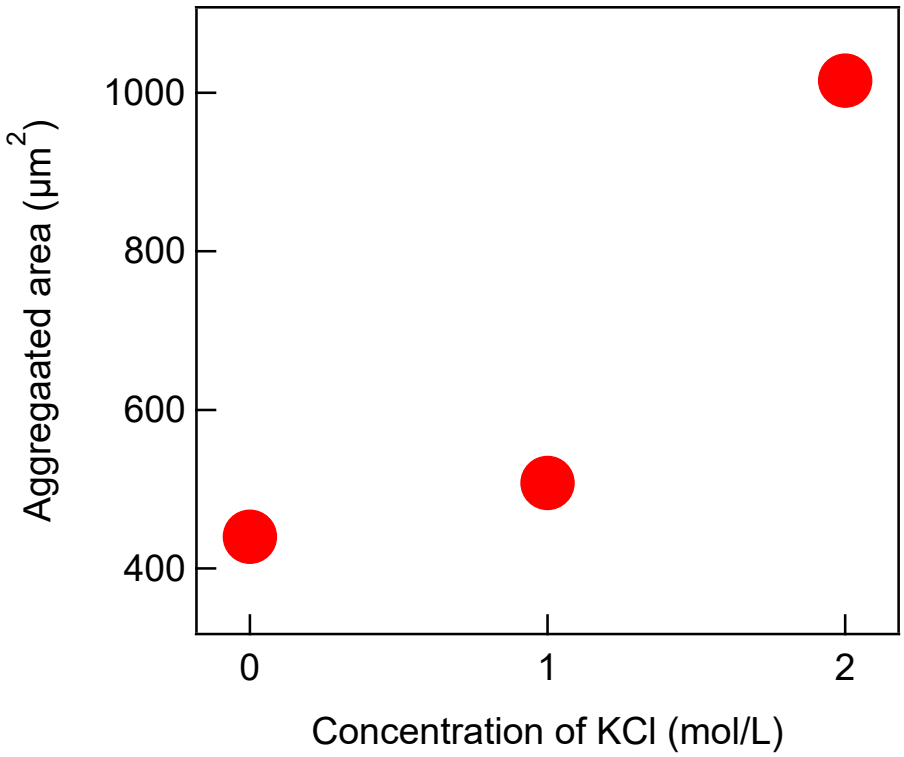

Figure S2 KCl concentration dependence of PS beads aggregation area.

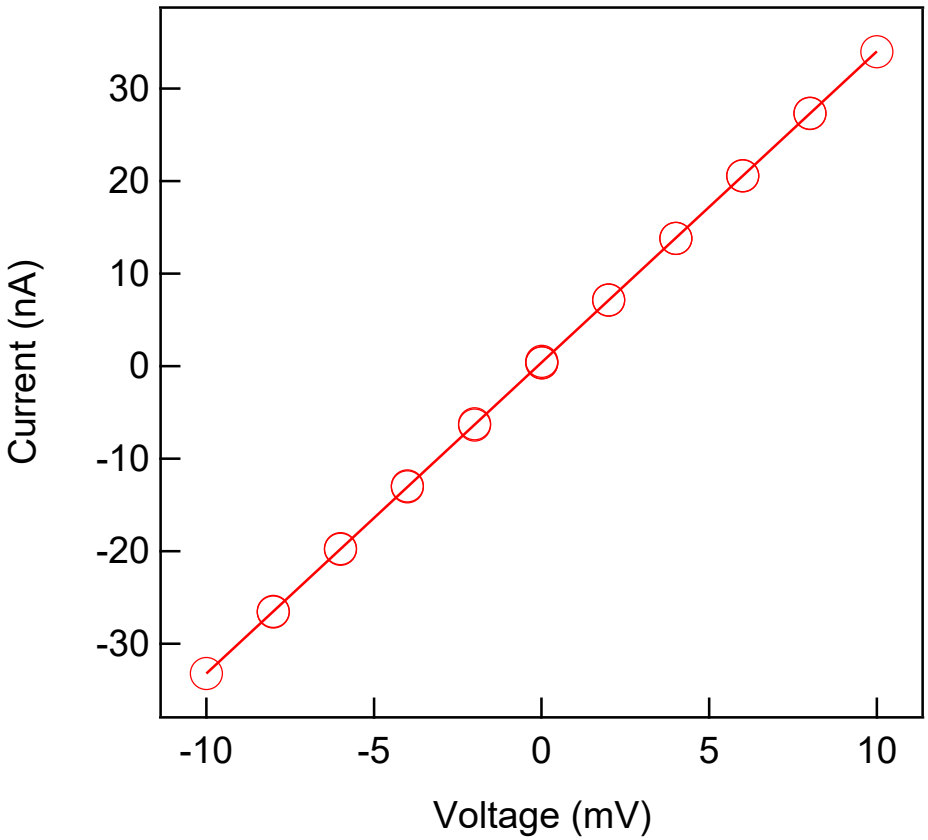

Figure S3 IV curve of micro-sized pore at V = -10 mV to 10 mV under 0.1M KCl 1mM HEPES pH7.

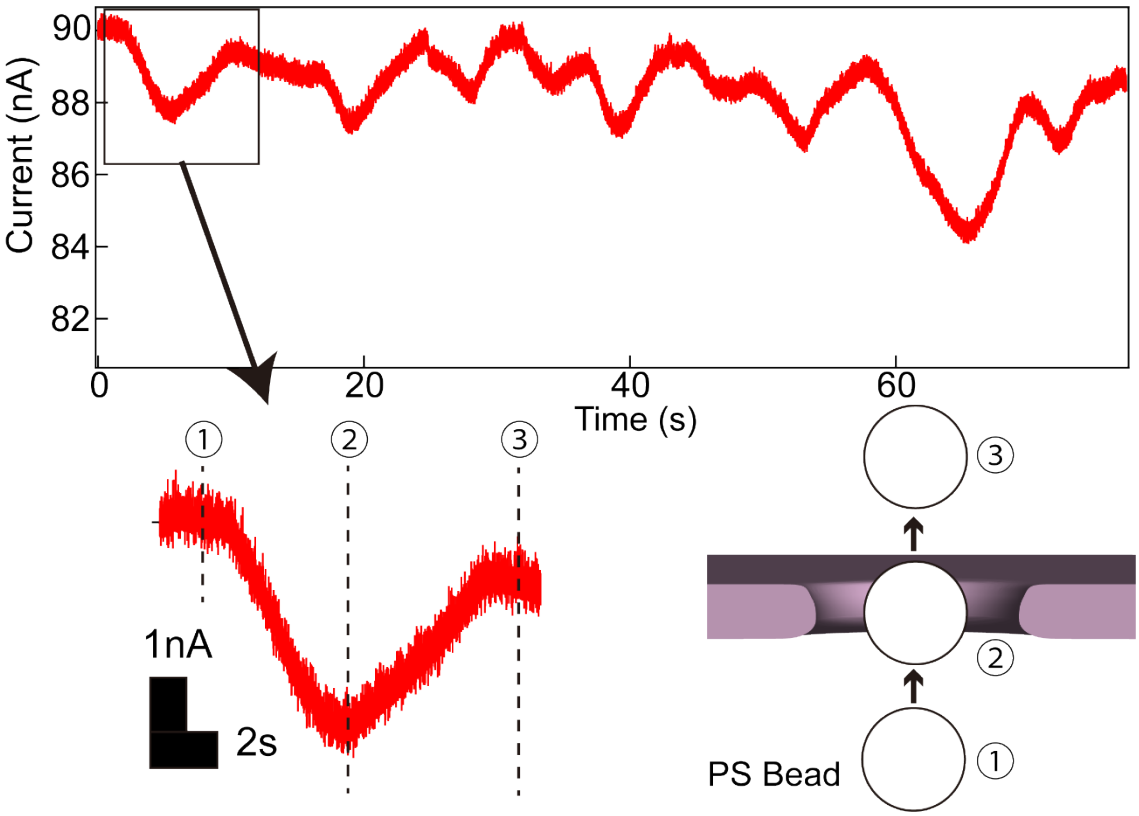

Figure S4 Continuous current trace of PS bead translocation through micropore at 50 mV.

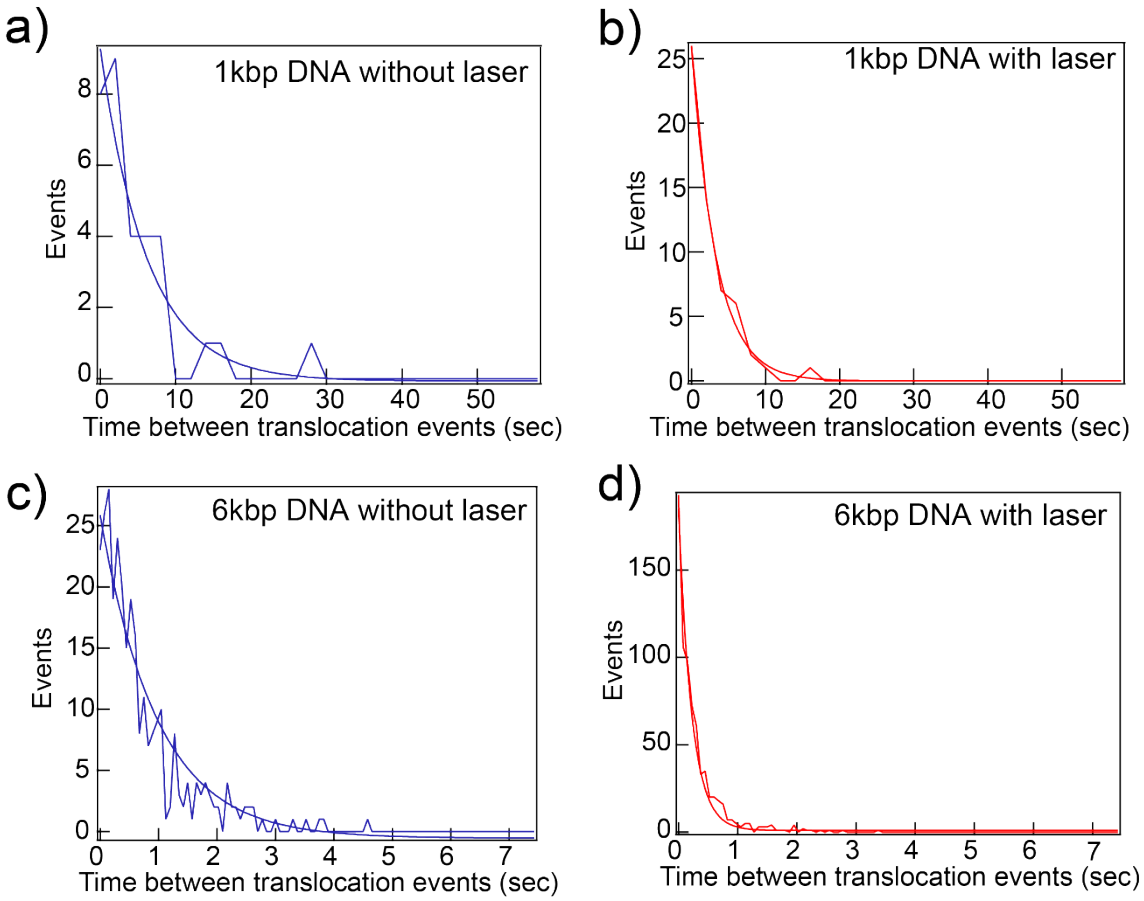

Figure S5 Histogram of time between translocation events for (a) and (b) 1kbp dsDNA without and with laser and (c) and (d) 6kbp ds DNA without and with laser.