

A double-stranded molecular probe for homogeneous nucleic acid analysis

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Tuning the dynamic range with the equilibrium analysis

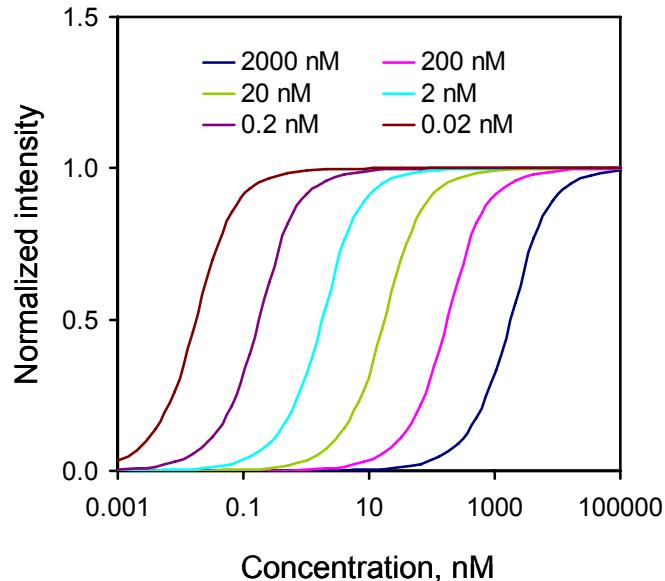


Figure S1. The equilibrium analysis was applied to estimate the effect of varying probe concentration for tailoring the dynamic range of the molecular sensor. The titration curve was determined at different fluorophore probe concentrations (0.02 nM to 2000 nM). The quencher-to-fluorophore ratio was maintained at 3:1. The titration curve shifts with the probe concentration for a large range of concentrations.

Effect of the quencher-to-fluorophore ratio on the titration curve

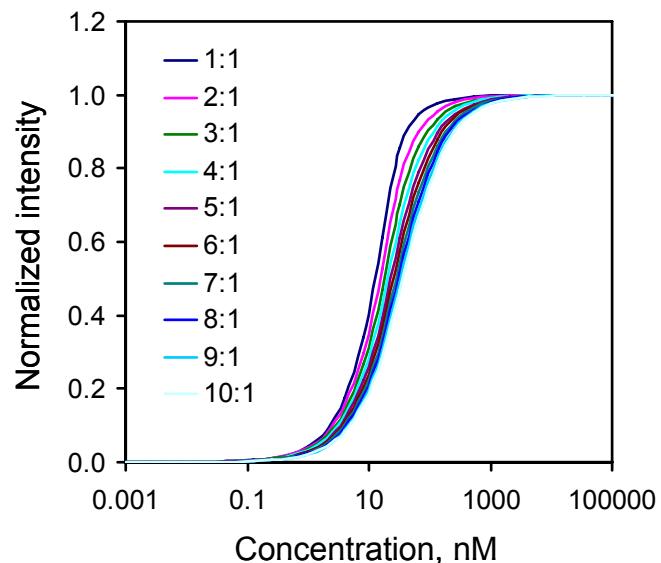


Figure S2. The equilibrium analysis was applied to evaluate the effect of the quencher-to-fluorophore ratio on the titration curve. The fluorophore probe concentration was fixed at 20 nM and the quencher probe concentration was increased from 20 to 200 nM to gauge the effect of the quencher-to-fluorophore ratio. Only a small shift of the titration curve was observed even up to a 10:1 ratio.