Supplementary Material

Non-sticky SiN_x nanonets for single protein denaturation analysis

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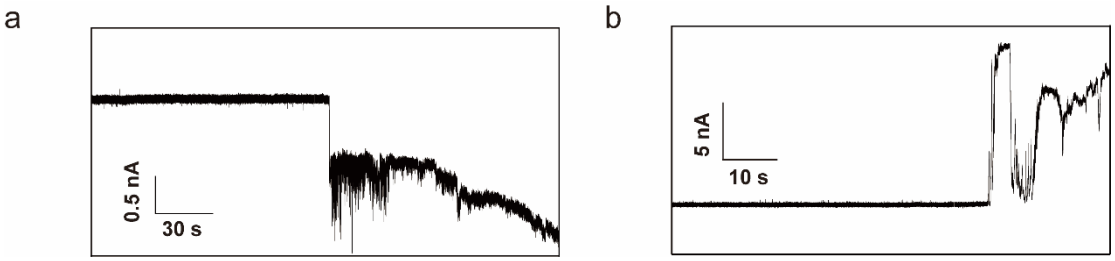

Figure S1. Typical current blocking signals of ovalbumin detected by SiNx nanonets at 100 mV (a), -100 mV (b).

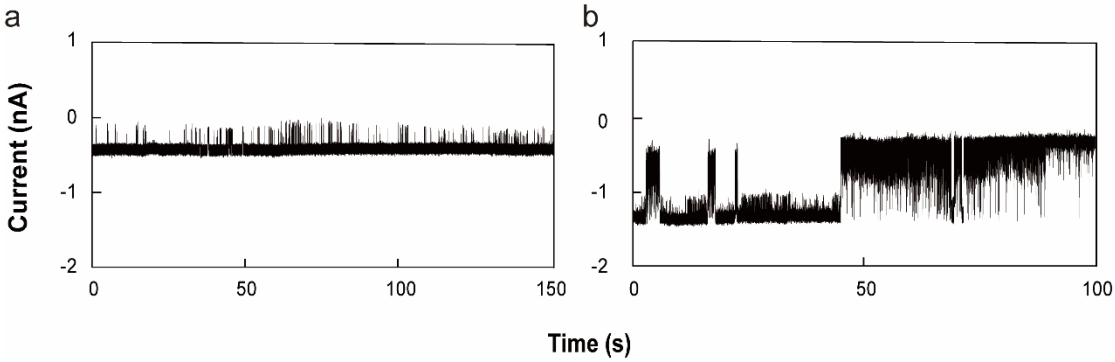

Figure S2. Typical current signals of ovalbumin detected by PEG-coated SiNx nanonets at -50 mV (a) and -150mV (b).

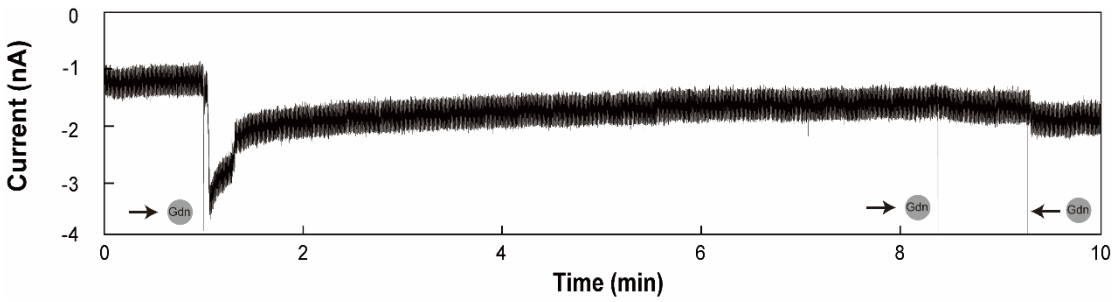

Figure S3. The current records of Gdn-HCl without proteins.

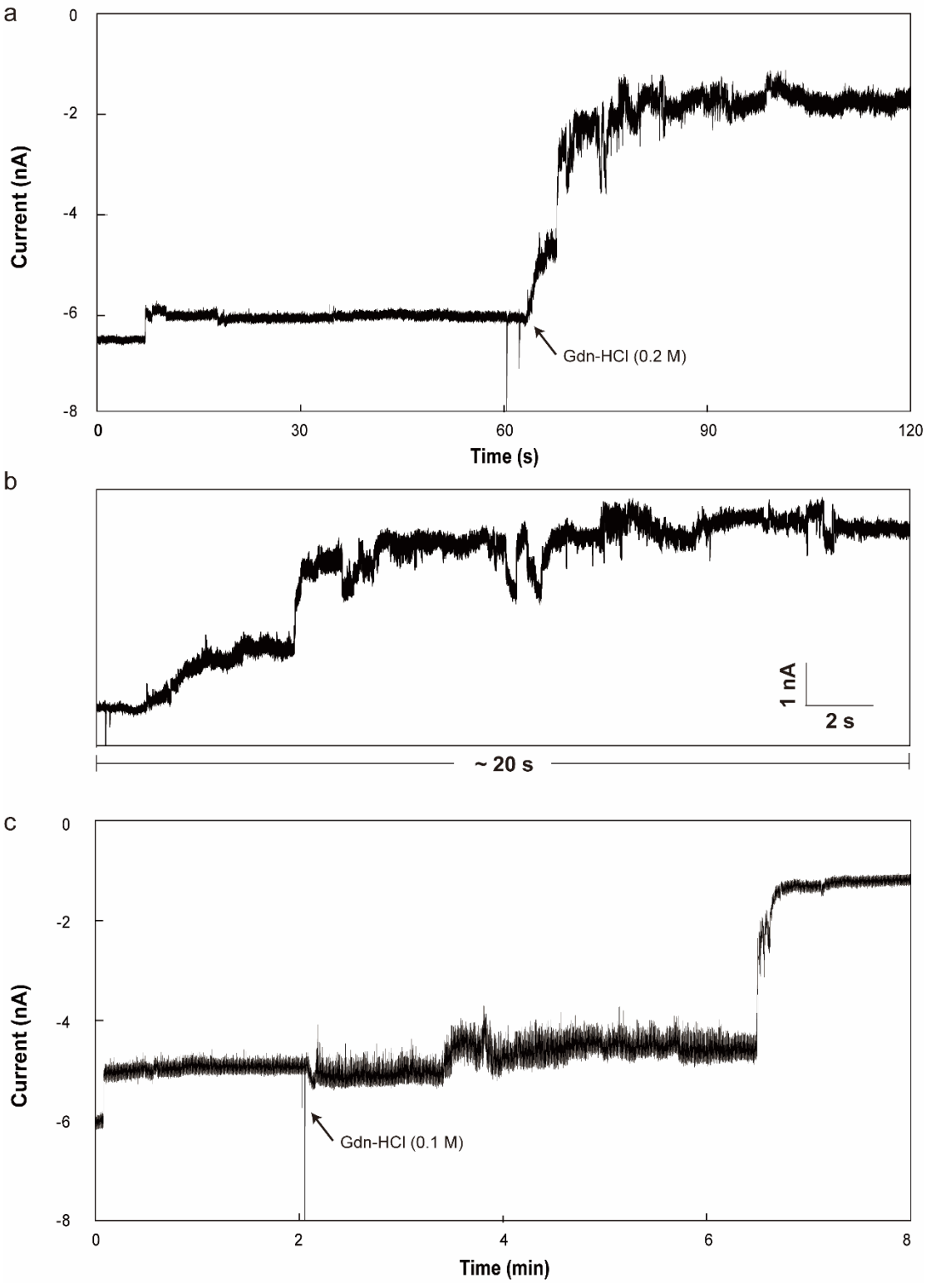

Figure S4. Current records of ovalbumin capture by electroosmotic flow and subsequent changes of ionic current with time in the presence of 0.2 M Gdn-HCl (a), 0.1 M Gdn-HCl (c). The data was collected at -200 mV (a) and -100 mV (c), respectively. (b) a detailed enlarged view of the denaturation phase in (a).

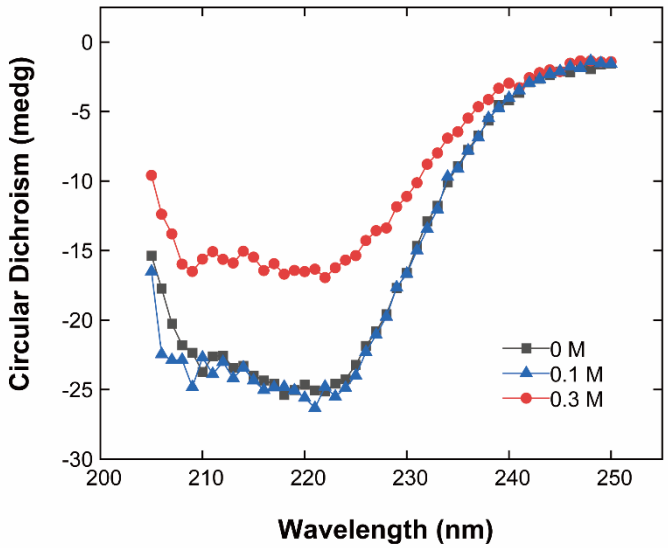

Figure S5. Effect of Gdn-HCl on the CD spectrum of ovalbumin. Leave for 12 h after adding denaturant.