SUPPLEMENTARY INFORMATION

Curli mediate bacterial adhesion to fibronectin via tensile multiple bonds

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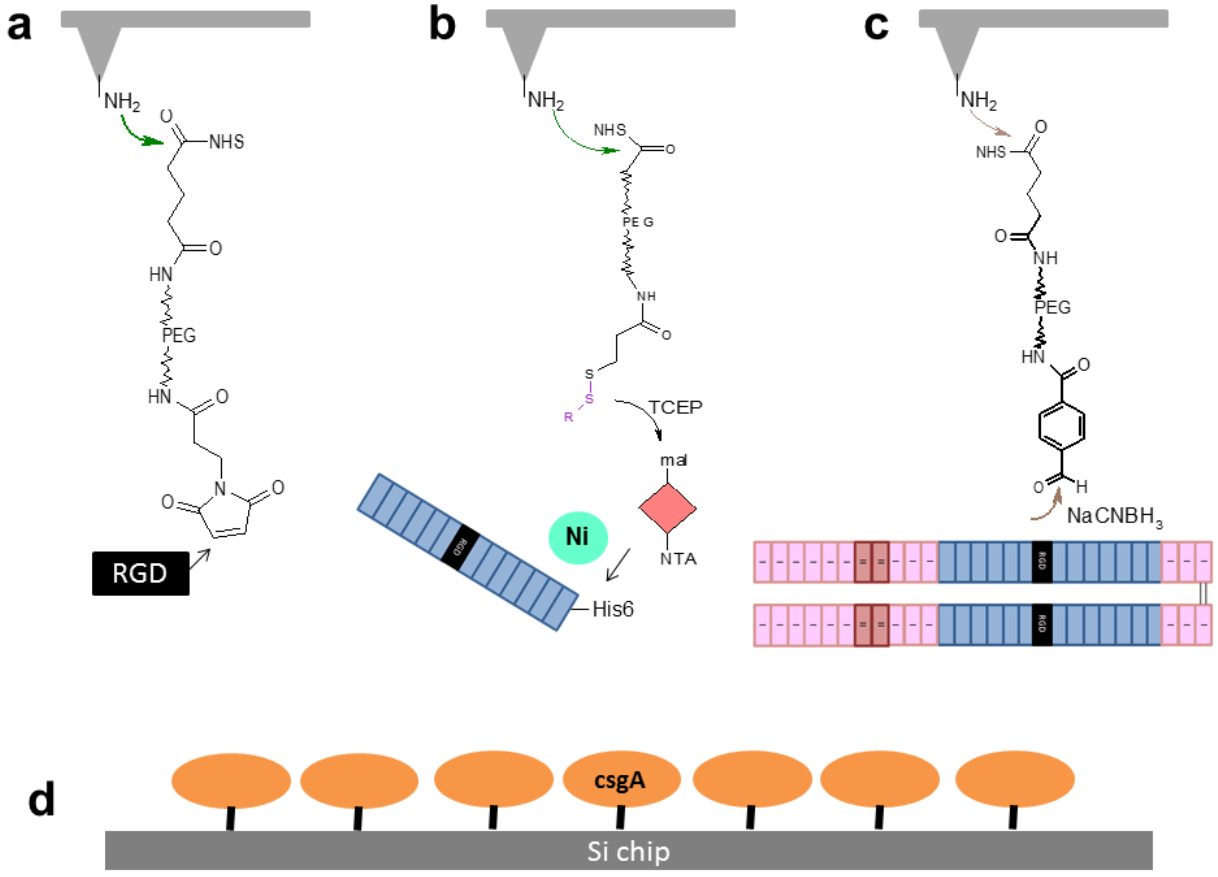

Figure S1| Scheme of immobilization strategy for single molecular force spectroscopy experiments. Tip and probe surfaces were amino-functionalized as a first step, before a flexible poly(ethylene glycol) (PEG) linker was added. In the final coupling step, proteins were bound to different end groups of the PEG linker. **a**, RGD peptide was bound to maleimide-PEF via cysteine. **b**, Fibronectin domain III (FN III) to tris-nitrilotriacetic acid (NTA)-PEG via C-terminal his_6 tag. **c**, Fibronectin (FN) to aldehyde-PEG linker via lysine residues. **d**, CsgA monomers to NTA-PEG via his_6 tag. For all fibronectin constructs (a,b,c) RGD epitopes are marked in black.

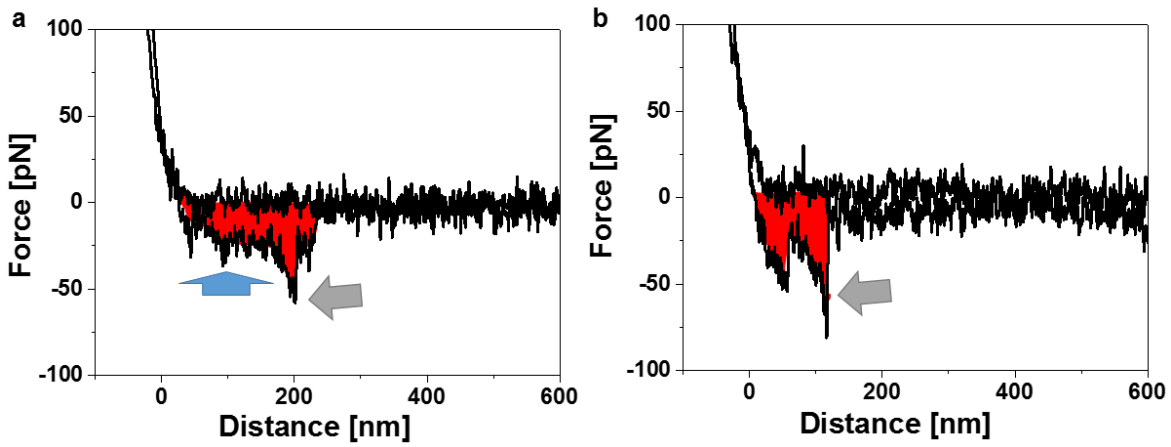

Figure S2| Typical force-distance curves recoreded from RGD/CsgA(+) interactions. Red area indicates the calculated de-adhesion work. **a**, Blue arrow shows membrane and curli fiber extension during retraction of the RGD-bound AFM tip. **b**, The grey arrow indicates a typical unbinding event between RGD and the CsgA(+) bacterial surface.