SUPPLEMENTAL MATERIAL

History, rare and multiple events of mechanical unfolding of repeat proteins

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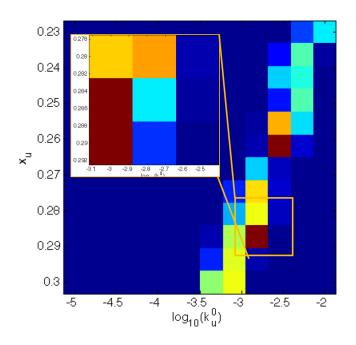


Figure S1. Likelihood function $\exp(-\chi^2/2)$ for the fit with parameters x_u and k^0 obtained from the Monte Carlo simulations.

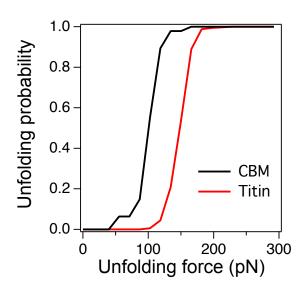


Figure S2. Unfolding probability for the CBM and titin domains. The average unfolding force of CBM was 120±20 pN.

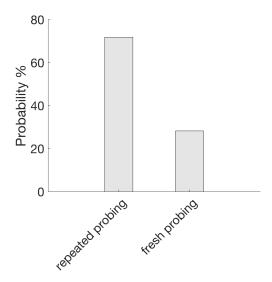


Figure S3. The quantification of the force-extension curves with missing titin I91 domains. 72% of the 85 force-extension curves presenting missing titin domains were obtained with repeated probing the same spot. Only the force-extension curves with missing titin domain(s) on the same location after a successful 8 titin unfolding event were counted as repeated probing events. Force extension curves with missing titin domain(s) observed at the first probing of the surface spot were counted as fresh probing.

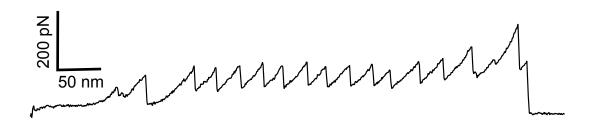


Figure S4. The only observed event showing more than the eight expected titin unfolding peaks.