

Table 1. Bond parameters for type1 and P pili of <i>E. coli</i> .				
Parameters <sup>[a]</sup>	Type 1 (our work) <sup>[a]</sup>	Type 1 (Ref. [17])	Type 1 (Ref. [46])	P pili (our work) <sup>[a]</sup>
$F_{AB}$ [pN]	$30 \pm 2$	$60^{[b]}$	22	$28 \pm 2$
$\Delta x_{AB}$ [nm]	–	–	$5 \pm 0.3$	$3.5 \pm 0.1$
$\Delta x_{AT}$ [nm]	$0.59 \pm 0.06$	0.2	$0.26 \pm 0.01$	$0.76 \pm 0.11$
$k_{AB}^{th}$ [Hz]	$0.016 \pm 0.009$	0.05	0.5	$0.8 \pm 0.5$
$k_{AB}^{bal}$ [Hz]	$1.2 \pm 0.9$	0.8	2.2	$120 \pm 75$
$\Delta V_{AB}$ [kT]	$37 \pm 2$	$16^{[c]}$	25	$24 \pm 1$
$\Delta V_{AT}$ [kT]	$27 \pm 2$	$26^{[c]}$	29	$23 \pm 1$
$\dot{L}^*$ [nm s <sup>-1</sup> ]	6	–	–	400

[a] Refs. [28–31,33,34,44,45]. [b] Measured at  $1\text{--}3 \mu\text{m s}^{-1}$ , which according to our measurements is not at steady-state. [c] At an attempt rate of  $10^{10}$  Hz.

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