Table 1. Kinetic parameters used to make the quantitative estimates in the text and plots in the figures.

Kinetic Rate	Symbol	Value	Reference
Unregulated promoter transcription rate	r	$0.33 s^{-1}$	[99]
Repressor and activator associations rates	k_R^0, k_A^0	$0.0027\ (\text{s nM})^{-1}$	[2]
Repressor and activator dissociation rates	k_R^{off}, k_A^{off}	$0.0023\ \text{s}^{-1}$	[42]
mRNA decay rate	γ	$0.011\ \text{s}^{-1}$	[10]
Ratio between transcription rates due to activation	$f = r_1/r_2$	11	[50]
Cooperativity in repression	$\Omega_{repression}$	0.013	[50]
Cooperativity in activation	$\Omega_{activation}$	0.1	[33]
Looping J-factor	$[J]$	660 nM	[33]
Protein translation burst size	b	31.2 proteins/mRNA	[5]
Protein decay rate	$[J]$	$0.00083 s^{-1}$	[99]

These parameters are all measured for model systems such as the P_{lac} promoter or the P_{RM} in *E. coli*, and are here considered representative for promoter-transcription factor interactions.
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