

Table 1.

Parameter value	Meaning
$m = 60$	For plasmids containing ColE1 origin of replication*
$\alpha = 11$	Degree of transcriptional activation <sup>†</sup>
$c_1 = 0.05$	Equilibrium constant for cI dimerization <sup>†</sup>
$c_2 = 0.33$	Equilibrium constant for cI-OR1 reaction <sup>†</sup>
$\sigma_1 = 2.0$	Binding affinity for cI dimer to OR2 relative to OR1 <sup>†</sup>
$\sigma_2 = 0.08$	Binding affinity for cI dimer to OR3 relative to OR1 <sup>†</sup>
$\beta = 100.0$	Basal production rate of 100 proteins in one cell-division time
$\eta = 0.01$	Efficiency of GFP monomer production versus that of cI
$\gamma_g = 10.0$	GFP degradation of 10 monomers in one cell-division time
$b_0 = 4.0$	Constant in relationship of GFP number to fluorescence
$\gamma_x = 500 - 15000$	Number of cI monomers destabilized per cell-division time
$c(\gamma_x) = 2.0 - 5.7$	Proportionality constant relating number of GFP number to fluorescence

\* Lutz, R. & Bujard, H. (1997) *Nucleic Acids Res.* **25**, 1203–1210.

<sup>†</sup> Ptashne, M. (1992) *A Genetic Switch: Phage  $\lambda$  and Higher Organisms* (Cell Press & Blackwell Scientific Publications, Cambridge, MA), 2nd Ed.