

Table S1: Species and initial numbers of the Lac-Gfp model

Species	Notation	Initial Distribution
LacI mRNA	<i>lacI</i>	U([0, 5])
LacI protein monomer	<i>LACI</i>	U([0, 10])
LacI dimer	<i>LACI2</i>	fixed to 0
Unoccupied (active) Lac promoter	<i>PLac</i>	fixed to 0
Occupied Lac promoter with 2 repressor molecules bound	<i>O2Lac</i>	fixed to 0
Occupied Lac promoter with 4 repressor molecules bound	<i>O4Lac</i>	U([50, 70])
GFP mRNA	<i>gfp</i>	fixed to 0
“Dark” GFP protein	<i>GFP</i>	fixed to 0
Mature GFP protein	<i>mGFP</i>	fixed to 0

U($[a, b]$) denotes the uniform distribution on the interval $[a, b]$.