



Parameter set with induced full lysis, positive LuxR regulation

DAHL	diffusion rate of AHL across the cellular membrane	8.00
k-1	RA dissociation rate	1.78
k1	RA formation rate	8.24
k2	formation & maturation rate of the full fluorescent protein	4.93
k3	aiiA activity	0.55
Km1	Michaelis-Menten constant of pLuxA for RA	0.10
Km2	Michaelis-Menten constant of pLuxB for RA	0.29
α 1	AHL production rate of LuxI	0.22
α 10	Leaky production rate of Lysis from pLuxB	0.00
α 11	Maximum production rate of Lysis from pLuxB	7.84
α 12	Constitutive production of split FP	3.73
α 13	aiiA expression	5.27
α 2	Leaky production rate of LuxI from pConst	0.00
α 3	Maximum production rate of LuxI from pConst	1.53
α 4	Leaky production rate of LuxI from pLuxA	0.00
α 5	Maximum production rate of LuxI from pLuxA	9.04
α 6	Leaky production rate of LuxR from pConst	1.96
α 7	Maximum production rate of LuxR from pConst	0.01
α 8	Leaky production rate of LuxR from pLuxA	9.50
α 9	Maximum production rate of LuxR from pLuxA	0.00
β 1	degradation rate of cellular AHL	7.12
β 2	degradation rate of external AHL	2.82
β 3	degradation rate of RA	1.84
β 4	degradation rate of RA2	7.28
β 5	LuxI degradation rate	8.35
β 6	LuxR degradation rate	0.01
β 7	Lysis degradation	0.00
β 8	Split FP degradation	0.00
β 9	aiiA degradation	0.00

