Table 2. Basal parameters for the expanded model

Name	Value	Description
v_{mp}	5	Maximum rate of synthesis of *per* mRNA
v_{mt}	5	Maximum rate of synthesis of *tim* mRNA
v_{mc}	0.125	Maximum rate of synthesis of *dClk* mRNA
k_{dmp}	0.5	First-order rate constant for *per* mRNA degradation
k_{dmt}	0.5	First-order rate constant for *tim* mRNA degradation
k_{dmc}	0.5	First-order rate constant for *dClk* mRNA degradation
v_p	2.5	Rate constant for translation of *per* mRNA
v_t	2.5	Rate constant for translation of *tim* mRNA
v_c	2.5	Rate constant for translation of *dClk* mRNA
k_{p1}	50	V_{max} for monomeric PER phosphorylation
k_{p2}	0.15	V_{max} for dimeric PER phosphorylation
k_{p3}	0.5	First-order rate constant for proteolysis of PER
k_{t3}	0.5	First-order rate constant for proteolysis of TIM
k_{dc}	0.5	First-order rate constant for proteolysis of dCLK
k_{app}	50	Association rate const for PER-PER homodimerization
k_{dpp}	0.5	Dissociation rate const for PER-PER homodimers
k_{apt}	50	Association rate const for PER-TIM heterodimerization
k_{dpt}	0.5	Dissociation rate const for PER-TIM heterodimers
k_{acc}	50	Association rate const for CYC-dCLK heterodimerization
k_{dcc}	0.5	Dissociation rate const for CYC-dCLK heterodimers
k_{aitf}	50	Association rate const for PER—CYC-dCLK complex
k_{ditf}	0.5	Dissociation rate const for PER—CYC-dCLK complex
k_{in}	5	Nuclear import rate constant
k_{out}	0.5	Nuclear export rate constant
K_1	1	Michaelis constant for synthesis of *per* mRNA
K_2	1	Michaelis constant for synthesis of *tim* mRNA
m	7	Hill exponent of *per* and *tim* mRNA synthesis

Name	**Value**	**Description**
n	2	Hill exponent of *dclk* mRNA synthesis
Y_{tot}	10	Total concentration of CYCLE protein
J_p	0.05	Michaelis constant for protein kinase (DBT)
k	0.1	A constant for the activity of dCLK feedback loop