Parameter values for 3 – loop model of Arabidopsis clock			
Parameter Name	Parameter Value	Parameter Description	Dimensions
q1	4.1954	Coupling constant of light activation of LHY transcription	1/h
n0	0.0500	Maximum light-dependent LHY transcription rate	nM/h
g0	1	Maximum light-dependent LHY transcription rate	nM/h
α	4.000	Constant of repression by APPR7/9	nM
n1	7.8142	Maximum light-independent LHY transcription rate	nM/h
a	1.2479	Hill coefficient of activation by protein X	
g1	3.1383	Constant of activation by protein X	nM
m1	1.9990	Maximum rate of LHY mRNA degradation	nM/h
k1	2.3920	Michaelis constant of LHY mRNA degradation	nM
p1	0.8295	Rate constant of LHY mRNA translation	1/h
r1	16.8363	Rate constant of LHY transport into nucleus	1/h
r2	0.1687	Rate constant of LHY transport out of nucleus	1/h
m2	20.4400	Maximum rate of cytoplasmic LHY degradation	nM/h
k2	1.5644	Michaelis constant of cytoplasmic LHY degradation	nM
m3	3.6888	Maximum rate of nuclear LHY degradation	nM/h
k3	1.2765	Michaelis constant of nuclear LHY degradation	nM
n2	3.0087	MaximumTOC1 transcription rate	nM/h
b	1.0258	Hill coefficient of activation by protein Y	
g2	0.0368	Constant of activation by protein Y	nM
g3	0.2658	Constant of repression by LHY	nM
c	1.0258	Hill coefficient of repression by LHY	
m4	3.8231	Maximum rate of TOC mRNA degradation	nM/h
k4	2.5734	Michaelis constant of TOC mRNA degradation	nM
p2	4.3240	Rate constant of TOC1 mRNA translation	1/h
r3	0.3166	Rate constant of TOC1 movement into nucleus	1/h
r4	2.1509	Rate constant of TOC1 movement out of nucleus	1/h
m5	0.0013	Maximum rate of light dependent cytoplasmic TOC1 degradation	nM/h
m6	3.1741	Maximum rate of light independent cytoplasmic TOC1 degradation	nM/h
k5	2.7454	Michaelis constant of cytoplasmic TOC1 degradation	nM
m7	0.0492	Maximum rate of light dependent nuclear TOC1 degradation	nM/h
m8	4.0424	Maximum rate of light independent nuclear TOC1 degradation	nM/h

Parameter Name	Parameter Value	Parameter Description	Dimensions
k6	0.4033	Michaelis constant of nuclear TOC1 degradation	nM
n3	0.2431	Maximum transcription rate of protein X	nM/h
d	1.4422	Hill coefficient of activation by TOC1	
g4	0.5388	Constant of activation by TOC1	nM
m9	10.1132	Maximum rate of degradation of protein X mRNA	nM/h
k7	6.5585	Michaelis constant of protein X mRNA degradation	nM
p3	2.1470	Rate constant of X mRNA translation	1/h
r5	1.0352	Rate constant of protein X movement into nucleus	1/h
r6	3.3017	Rate constant of protein X movement out of nucleus	1/h
m10	0.2179	Maximum rate of degradation of cytoplasmic protein X	nM/h
k8	0.6632	Michaelis constant of cytoplasmic protein X degradation	nM
m11	3.3442	Maximum rate of degradation of nuclear protein X	nM/h
k9	17.1111	Michaelis constant of nuclear protein X degradation	nM
q2	2.4017	Coupling constant of light activation of Y mRNA transcription	1/h
n4	0.0857	Light dependent component of Y transcription	nM/h
n5	0.1649	Light independent component of Y transcription	nM/h
g5	1.1780	Constant of repression by TOC1	nM
g6	0.0645	Constant of repression by LHY	nM
e	3.6064	Hill coefficient of repression by TOC1	
f	1.0237	Hill coefficient of repression by LHY	
m12	4.2970	Maximum rate of degradation of protein Y mRNA	nM/h
k10	1.7303	Michaelis constant of protein Y mRNA degradation	nM
p4	0.2485	Rate constant of Y mRNA translation	1/h
r7	2.2123	Rate constant of protein Y movement into nucleus	1/h
r8	0.2002	Rate constant of protein Y movement out of nucleus	1/h
m13	0.1347	Maximum rate of degradation of cytoplasmic protein Y	nM/h
k11	1.8258	Michaelis constant of cytoplasmic protein Y degradation	nM
m14	0.6114	Maximum rate of degradation of nuclear protein Y	nM/h
k12	1.8066	Michaelis constant of nuclear protein Y degradation	nM
p5	0.5000	Light dependent production of protein P	nM/h
k13	1.2000	Michaelis constant of protein P degradation	nM
m15	1.2000	Miaximum rate of protein P degradation	nM/h
q3	1.0000	Coupling constant of light activation of protein P degradation	1/h

Parameter Name	Parameter Value	Parameter Description	Dimensions
q4	2.4514	Coupling constant of light activation of LHY transcription	1/h
g	1.0258	Hill coefficient of activation by LHY	
n6	8.0706	Maximum light-independent APRR7/9 transcription rate	nM/h
n7	0.0002	Maximum light-dependent APPR7/9 transcription rate	$(nM/h)(nM)^g$
g7	0.0004	Constant of activation by LHY	nM
m16	12.2398	Maximum rate of degradation of APRR7/9 mRNA	nM/h
k14	10.3617	Michaelis constant of APRR7/9 mRNA degradation	nM
p6	0.2907	Rate constant of APRR7/9 mRNA translation	1/h
r9	0.2528	Rate constant of APRR7/9 protein movement out of nucleus	1/h
r10	0.2212	Rate constant of APRR7/9 protein movement into the nucleus	1/h
m17	4.4505	Maximum rate of degradation of cytoplasmic protein APRR7/9	nM/h
k15	0.0703	Michaelis constant of cytoplasmic protein APRR7/9 degradation	nM
m18	0.0156	Maximum rate of degradation of nuclear protein APRR7/9	nM/h
k16	0.6104	Michaelis constant of nuclear protein APRR7/9 degradation	nM