Table S14. Synchronization levels with different pulse durations (medium *MET3pr* strength, forcing period of 78 min)

Pulse duration (min)	f_{synch}	Cycle failure ratio
10	0.12 ± 0.09	0.00 ± 0.00
20	0.25 ± 0.06	0.00 ± 0.00
30	0.26 ± 0.07	0.00 ± 0.00
40	0.34 ± 0.08	0.00 ± 0.00
50	0.21 ± 0.05	0.00 ± 0.00
60	0.06 ± 0.04	0.01 ± 0.00

f_{synch} is the fraction of time points (between 300–700 min in the simulations) at which more than 95% or less than 5% of the cells are budded. The simulation statistics (mean ± standard deviation) are computed from 15 independent realizations per promoter strength. In each realization, a budding index trajectory is generated from a pedigree. Each trajectory starts from a single cell and the number of cells within the pedigree increases exponentially due to cell division. The number of the failed cycles (due to event execution errors listed in Table S9) normalized by the number of complete cycles is the cycle failure ratio.