Supporting information for Gonze *et al.* (January 15, 2002) *Proc. Natl. Acad. Sci. USA*, 10.1073/pnas.022628299.

Table 2. Parameter values used for stochastic simulations of the detailed molecular model for circadian oscillations

Reaction steps	Parameter values
Steps 1–8	For $n = 4$: $a_1 = \Omega\ \text{mol}^{-1}\ \text{h}^{-1}$, $d_1 = (160 \times \Omega)\ \text{h}^{-1}$, $a_2 = (10 \times \Omega)\ \text{mol}^{-1}\ \text{h}^{-1}$, $d_2 = (100 \times \Omega)\ \text{h}^{-1}$, $a_3 = (100 \times \Omega)\ \text{mol}^{-1}\ \text{h}^{-1}$, $d_3 = (10 \times \Omega)\ \text{h}^{-1}$, $a_4 = (100 \times \Omega)\ \text{mol}^{-1}\ \text{h}^{-1}$, $d_4 = (10 \times \Omega)\ \text{h}^{-1}$ For $n = 3$: $a_1 = \Omega\ \text{mol}^{-1}\ \text{h}^{-1}$, $d_1 = (80 \times \Omega)\ \text{h}^{-1}$, $a_2 = (100 \times \Omega)\ \text{mol}^{-1}\ \text{h}^{-1}$, $d_2 = (100 \times \Omega)\ \text{h}^{-1}$, $a_3 = (100 \times \Omega)\ \text{mol}^{-1}\ \text{h}^{-1}$, $d_3 = \Omega\ \text{h}^{-1}$ For $n = 2$: $a_1 = \Omega\ \text{mol}^{-1}\ \text{h}^{-1}$, $d_1 = (40 \times \Omega)\ \text{h}^{-1}$, $a_2 = (100 \times \Omega)\ \text{mol}^{-1}\ \text{h}^{-1}$, $d_2 = (10 \times \Omega)\ \text{h}^{-1}$ For $n = 1$: $a_1 = (10 \times \Omega)\ \text{mol}^{-1}\ \text{h}^{-1}$, $d_1 = (20 \times \Omega)\ \text{h}^{-1}$
Step 9	$v_s = (0.5 \times \Omega)\ \text{mol h}^{-1}$
Steps 10–12	$k_{m1} = 165\ \text{mol}^{-1}\ \text{h}^{-1}$, $k_{m2} = 30\ \text{h}^{-1}$, $k_{m3} = 3\ \text{h}^{-1}$, $E_{m\ tot} = E_m + C_m = (0.1 \times \Omega)$ mol
Steps 13	$k_s = 2.0\ \text{h}^{-1}$
Steps 14–16	$k_{11} = 146.6\ \text{mol}^{-1}\ \text{h}^{-1}$, $k_{12} = 200\ \text{h}^{-1}$, $k_{13} = 20\ \text{h}^{-1}$ $E_{1\ tot} = E_1 + C_1 = (0.3 \times \Omega)$ mol
Steps 17–19	$k_{21} = 82.5\ \text{mol}^{-1}\ \text{h}^{-1}$, $k_{22} = 150\ \text{h}^{-1}$, $k_{23} = 15\ \text{h}^{-1}$, $E_{2\ tot} = E_2 + C_2 = (0.2 \times \Omega)$ mol
Steps 20–22	$k_{31} = 146.6\ \text{mol}^{-1}\ \text{h}^{-1}$, $k_{32} = 200\ \text{h}^{-1}$, $k_{33} = 20\ \text{h}^{-1}$, $E_{3\ tot} = E_3 + C_3 = (0.3 \times \Omega)$ mol
Steps 23–25	$k_{41} = 82.5\ \text{mol}^{-1}\ \text{h}^{-1}$, $k_{42} = 150\ \text{h}^{-1}$, $k_{43} = 15\ \text{h}^{-1}$, $E_{4\ tot} = E_4 + C_4 = (0.2 \times \Omega)$ mol
Steps 26–28	$k_{d1} = 1650\ \text{mol}^{-1}\ \text{h}^{-1}$, $k_{d2} = 150\ \text{h}^{-1}$, $k_{d3} = 15\ \text{h}^{-1}$, $E_{d\ tot} = E_d + C_d = (0.1 \times \Omega)$ mol
Steps 29–30	$k_1 = 2.0\ \text{h}^{-1}$, $k_2 = 1.0\ \text{h}^{-1}$

mol, molecules. Numbered steps refer to those listed in Table 1.