

Table S1: **Statistics of data fits.** For each cell type, the percentage of successful fits, as well as the fraction of cells for which the damped and self-sustained model, respectively, was rejected with  $P < 0.05$ . The data is from the study of Liu et al. [5], except for (\*), which are the neurons from the study of Yamaguchi et al. [6].

Cell type	Successful fits	Damped model rejected	Self-sustained model rejected
WT fibroblast	100%	25%	15%
<i>Cry1</i> <sup>-/-</sup> fibroblast	80%	13%	0%
<i>Cry2</i> <sup>-/-</sup> fibroblast	100%	25%	40%
<i>Per1</i> <sup>-/-</sup> fibroblast	80%	0%	13%
WT SCN neuron	88%	9.0%	2.1%
<i>Cry1</i> <sup>-/-</sup> SCN neuron	53%	4.8%	1.6%
<i>Cry2</i> <sup>-/-</sup> SCN neuron	93.2%	0.66%	7.9%
<i>Per1</i> <sup>-/-</sup> SCN neuron	60%	6.7%	2.7%
WT SCN neuron (*)	100%	1.9%	26%