

**Table S2. Auto-repressor network reactions**

<b>Reaction</b>	<b>Rate</b>	<b>Description</b>
$d_0 + x \leftrightarrow d_1$	$k_y, k_{-y}$	binding and unbinding of the repressor to the promoter
$x \rightarrow \phi$	$g_y$	degradation of the repressor
$d_0 \rightarrow d_0 + x$	$a_y(1 + K)$	synthesis of the repressor (delayed reaction)