## Table S2. Kinetic constants to simulate a weak and strong response to half-dosage of $bcd^{K57R}$

The simulations for weak and strong response to half-dosage of  $bcd^{K57R}$  are the heavy blue lines in Fig. 1G and 1H, respectively. All other parameters as in Table S1. This value of  $k_{0,B}$  was also used to simulate WT Bcd half-dosage ( $bcd^{E1}/+$ ; heavy blue line in Fig. 1F).

Strong K57R	Weak K57R
$k_{0,B} = 1.2908 + 03$	$k_{0,B} = 1.2908e + 03$
$k_{b1,b2} = 4.3677e-04$	$k_{b1,b2} = 5.8440e-04$
$k_{b2,b3} = 7.8953e-04$	$k_{b2,b3} = 1.4135e-03$
$k_{b3,b4} = 1.4272e-03$	$k_{b3,b4} = 3.4189e-03$
$k_{b4,b5} = 2.580e-03$	$k_{b4,b5} = 8.2693e-03$
$k_{b5,b6} = 4.6637e-03$	$k_{b5,b6} = 2.0001e-02$