Table S2. Best-fit Dornhorst model parameters from fits to population and cohort survival data for each genotype, with 95\% C.I.'s from the Monte Carlo technique in brackets.

| genotype | $\begin{aligned} & \hline \text { Platelet } \\ & \text { count, } \quad N \\ & \left(\times 10^{3} \mu \mathrm{~L}^{-1}\right) \end{aligned}$ | Production rate, $S\left(\mathrm{x} 10^{3}\right.$ $\left.\mu \mathrm{L}^{-1} \mathrm{hr}^{-1}\right)$ | $\begin{aligned} & \hline \text { Natural life } \\ & \text { span, } T(\mathrm{hr}) \end{aligned}$ | random consumption rate constant, $r$ $\left(\mu \mathrm{L}^{-1} \mathrm{hr}^{-1}\right)$ | random <br> loss rate, $R$ <br> $\left(\mu \mathrm{L}^{-1} \mathrm{day}^{-1}\right)$ | random <br> consumption <br> fraction, $f$ | labelling efficiency, $e_{I}$ | labelling efficiency, $e_{2}$ | biotin halflife, $b_{1 / 2}(\mathrm{hr})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bcl-x ${ }^{+ \text {Plti2O }}$ | $847 \pm 35$ | $\begin{aligned} & \hline 16.4 \\ & {[15.5,18.2]} \end{aligned}$ | $\begin{aligned} & \hline 55.0 \\ & {[53.6,57.5]} \end{aligned}$ | $\begin{aligned} & \hline 0.0022 \\ & {[0.0000,0.0073]} \end{aligned}$ | 45 [0,149] | $\begin{aligned} & \hline 0.12 \\ & {[0.00,0.34]} \end{aligned}$ | $\begin{aligned} & \hline 0.912 \\ & {[0.900,0.928]} \end{aligned}$ | $\begin{aligned} & \hline 0.612 \\ & {[0.576,0.644]} \end{aligned}$ | 0.7 [0.0,2.0] |
| wild type | $1183 \pm 70$ | $\begin{aligned} & \hline 16.2 \\ & {[14.9,16.4]} \end{aligned}$ | $\begin{aligned} & \hline 111.9 \\ & {[102.3,112.4]} \end{aligned}$ | $\begin{aligned} & \hline 0.0082 \\ & {[0.0053,0.0085]} \end{aligned}$ | $\begin{aligned} & \hline 233 \\ & {[149,242]} \end{aligned}$ | $\begin{aligned} & \hline 0.60 \\ & {[0.42,0.61]} \end{aligned}$ | $\begin{aligned} & \hline 0.891 \\ & {[0.880,0.896]} \end{aligned}$ | $\begin{aligned} & \hline 0.595 \\ & {[0.575,0.621]} \end{aligned}$ | 5.2 [3.7,6.1] |
| Bak ${ }^{-/}$ | $1798 \pm 148$ | $\begin{gathered} 12.6 \\ {[11.9,13.3]} \end{gathered}$ | $\begin{aligned} & \hline 202.3 \\ & {[192.3,209.6]} \end{aligned}$ | $\begin{aligned} & \hline 0.0037 \\ & {[0.0028,0.0045]} \end{aligned}$ | $\begin{aligned} & \hline 159 \\ & {[118,195]} \end{aligned}$ | $\begin{aligned} & \hline 0.53 \\ & {[0.42,0.61]} \end{aligned}$ | $\begin{aligned} & \hline 0.830 \\ & {[0.820,0.840]} \end{aligned}$ | $\begin{aligned} & \hline 0.569 \\ & {[0.543,0.603]} \end{aligned}$ | 5.7 [3.6,8.1] |

