Table S7. Values of parameters that are present both in deterministic and stochastic models

Parameter	Value	Parameter	Value
γ_{Whi5}	1	kd_{swi5}	0.08
γ_{ki}	10	$ka_{swi5,14}$	2
γ_{cp}	0.8	$ki_{swi5,b2}$	8.5
γ_{tem}	0.1	$ka_{m1,b2}$	10
σ_{Whi5}	10	ki_{m1}	3
σ_{net}	8	ks_{20}	0.006
ks_{n3}	0.22	$ks_{20,m1}$	0.6
J_{n3}	6	kd_{20}	0.3
D_{n3}	1	ka_{20}	0.4
kd_{n3}	0.2	$kd_{b5,20,i}$	0.0145
ks_{k2}	0.0135	$kd_{clb2,20,i}$	0.037
kd_{k2}	0.25	$ki_{20,mad}$	20
kdp_{i5}	1	$ka_{cp,b2}$	1.3
kdp_{i514}	0.5	ki_{cp}	1
kp_{i5}	0	ka_{h1}	1
kp_{i5n3}	3	$ka_{h1,14}$	4.3
kp_{i5k2}	4	ki_{h1}	0
kp_{i5n2}	2	$ki_{h1,e}$	1
kp_{i5b5}	0	$e_{h1,n3}$	0.25
kdp_{bf}	1	$e_{h1,n2}$	0.7
kp_{bfb2}	5	$e_{h1,b5}$	9
ks_{n2}	0	$e_{h1,b2}$	5.6
ks_{n2bf}	0.24	kdp_{net}	0.1
kd_{n2}	0.12	$kdp_{net,14}$	0.1
ks_{ki}	0.0120	$kdp_{net,px}$	3
$ks_{ki,swi5}$	0.12	kp_{net}	0
kd_{ki}	0.005	$kp_{net,b2}$	0.25
kd_{kip}	2.5	$kp_{net,en}$	1
$kp_{ki,e}$	1	$kp_{net,15}$	0.03
$e_{ki,n3}$	1.05	ka_{px}	1
$e_{ki,k2}$	0.1	ki_{px}	0
$e_{ki,n2}$	0.4	$ki_{px,p1}$	3
$e_{ki,b5}$	2	ks_{pds}	0.03
$e_{ki,b2}$	4	kd_{pds}	0.05
kdp_{ki}	1	$kd_{pds,20}$	3
$kdp_{ki,14}$	1.8	$kd_{pds,20,i}$	0.3
ks_{b5}	0.0003	ka_{15}	0
$ks_{b5,bf}$	0.0145	$ka_{15,14}$	15
kd_{b5}	0.012	ki_{15}	1
$kd_{b5,20}$	0.1	$ki_{15,b2}$	0.5
ks_{b2}	0.0033	ka_{tem}	0
$ks_{b2,m1}$	0.022	$ka_{tem,lo}$	4.25
kd_{b2}	0.003	$ka_{tem,p1}$	0

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Table S7 – *Continued from previous page*

Parameter	Value	Parameter	Value
$kd_{b2,20}$	0.14	ki_{tem}	1
$kd_{b2,h1}$	0.6	$ki_{tem,px}$	22
$ks_{bud,e}$	0.3	ks_{lo}	0
$e_{bud,n3}$	0.05	$ks_{lo,m1}$	0.03
$e_{bud,n2}$	0.5	kd_{lo}	0.01
$e_{bud,b5}$	0.5	$kd_{lo,h1}$	0.01
$e_{bud,b2}$	0	ka_{lo}	0
kd_{bud}	0.01	$ka_{lo,b2}$	10
ks_{spn}	0.1	ki_{lo}	1
kd_{spn}	0.06	kas_{net}	1
J_{spn}	0.13	f	0.42
$ks_{ori,e}$	2	MDT	84 (or 100)
$e_{ori,b5}$	0.4	$Whi5_T$	2.5
$e_{ori,b2}$	0.7	SBF_T	1
kd_{ori}	0.06	$Mcm1_T$	1
ks_{swi5}	0.0050	APC_T	25
$ks_{swi5,m1}$	0.08	$Cdh1_T$	1
σ_{SBF}	10	$Net1_T$	3.55
σ_{CKI}	10	$Cdc14_T$	2
σ_{Swi5}	10	PPX_T	1
σ_{Cdh1}	10	$Esp1_T$	0.5
σ_{Mcm1}	10	$\mathrm{Cdc15}_T$	1
σ_{APC}	10	$Tem1_T$	2
σ_{Mad2}	10	$Mad2_T$	25
σ_{PPX}	10	γ_{SBF}	1
σ_{Polo}	10	γ_{Cdh1}	1
σ_{Tem1}	10	γ_{Mad2}	1
σ_{Cdc15}	10	γ_{PPX}	1
K_{EZ}	0.2	γ_{Net1}	1
K_{EZ2}	0.2	γ_{Polo}	1
		γ_{Cdc15}	1

In the stochastic simulations, the daughter cell mass retained after each division (f) is the remainder of the total mass after the mother fraction is randomly assigned from a normal distribution with 0.58 mean and 0.029 standard deviation.