

Supplementary Table 3. Temporal patterns of the protein levels

Protein	Experimental observations (concentration)	Model results (number)*
Cln3	The Cln3 level exhibits moderate periodicities in amplitude [1].	The Cln3 level increases about two fold in G1 phase and decreases during S phase.
Cln1,2	The Cln1,2 level and the Cln1,2/Cdc28 kinase activity are maximal at START [1].	The Cln1,2 level is maximal in M phase.
Sic1	Sic1 disappears at the G1/S transition and does not reappear until cell division [2].	The Sic1 level is low at the metaphase/anaphase boundary, peaks in late G1, and decreases during S phase.
Clb5,6	Clb5/Cdc28 kinase activity peaks around S phase [2]. Clb5 localizes in the nucleus until shortly before the metaphase/anaphase transition, and then it disappears during anaphase [3].	The Clb5,6 and Clb5,6/Cdc28 levels increase during S phase, peak around the metaphase/anaphase boundary, and start declining during anaphase.
Ndd1	The phosphorylated Ndd1 level increases in the G1/S transition, remains high in G2 phase, and declines in M phase [4].	The phosphorylated Ndd1 level increases during S and G2 phases, peaks at the metaphase/anaphase boundary, and decreases during anaphase.
Clb1,2	The Clb2 level peaks in M phase [5] and starts declining during anaphase B [6].	The Clb1,2 level increases during S phase, peaks at the metaphase/anaphase boundary, and decreases during anaphase.
Cdc20	The Cdc20 level is low in S phase, peaks in M phase, and declines at the M/G1 boundary [5].	The Cdc20 level is low in S phase, increases until the anaphase/telophase boundary, and then decreases.
Pds1	Pds1 disappears shortly before the onset of anaphase [6, 7].	The Pds1 level is low in G1 phase, increases during S and G2 phases, and then starts declining in metaphase.

Swi5	<p>Prior to anaphase, Swi5 is phosphorylated and localizes in cytoplasm, but it is dephosphorylated and translocated to nucleus around the anaphase/telophase boundary [8, 9].</p> <p>Most of Swi5 located in the nucleus is degraded by the time of cell separation [9].</p>	<p>The total Swi5 level peaks in M phase. The phosphorylated Swi5 level, which is assumed to locate in nucleus, sharply peaks at around the anaphase/telophase boundary.</p>
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*The protein levels are observed in concentration in experiments but in molecular numbers in the model.

References

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