

Supplementary Table 4 Cell division cycle sub-networks

1. Cell cycle checkpoint proteins (Cdc28p, Cks1p, cyclins and Cdk regulators Cln1p, Cln2p, Clb5p, Sic1p). The transcripts of cell cycle cyclin-dependent kinase Cdc28p and Cks1p are not cell-cycle regulated but are core components of the pathway.
2. Cohesin complex (Smc1p, Smc3p, Irr1p, Mcd1p) coupled to checkpoint kinase Cdc5p. Although the mRNA expression peaks are completely out of phase for cohesin and Cdc5p, the association of cohesin with Cdc5p is clear from the physical interaction data.
3. Replication factor A complex and DNA repair (Rfa proteins, Msh proteins).
4. Replication factor C complex (leading strand elongation, RFC proteins); coupled to alpha DNA polymerase:primase (Pol1p, Pol12p, Pri proteins) and epsilon DNA polymerase (replication fork and lagging strand elongation, Pol2p and Dpb).
5. Delta DNA polymerase (Cdc2p, Cdc9p, Pol30p, Pol32p).
6. Spindle pole body (Tub4p, Spc proteins); connected to calmodulin (Cmd1p) and calmodulin-regulated kinase (Cmk2p). Calmodulin is a key regulator of calcium-modulated signalling but is not transcriptionally regulated during the cell cycle.
7. Bud neck kinases (Gin4p, Kcc4p).
8. DNA repair (Sld2p replication fork, Rad54p helicase).
9. Microtubule binding (Bik1p, Bim1p).
10. Spindle pole body (Duo1p, Dam1p, Dad1p, Spc34p).
11. COPII-coated vesicle trafficking (Emp24p, ERV proteins).
12. Histones (Hta, Htb, Hhf, Hht, and Hho).
13. Cell wall synthesis (Kre6p, Slt2p).

14. G2/M checkpoint and nucleosome disassembly (Swe1p, Clb2p, Ahc1p).
15. Mitochondrial membrane (Nde1p, Pet9p).
16. DNA replication initiation (Cdc45-47p, MCM proteins).
17. Signal transduction (Bem1p, Far1p, Gpa1p).