Supplemental Materials

Molecular Biology of the Cell

Pope et al.

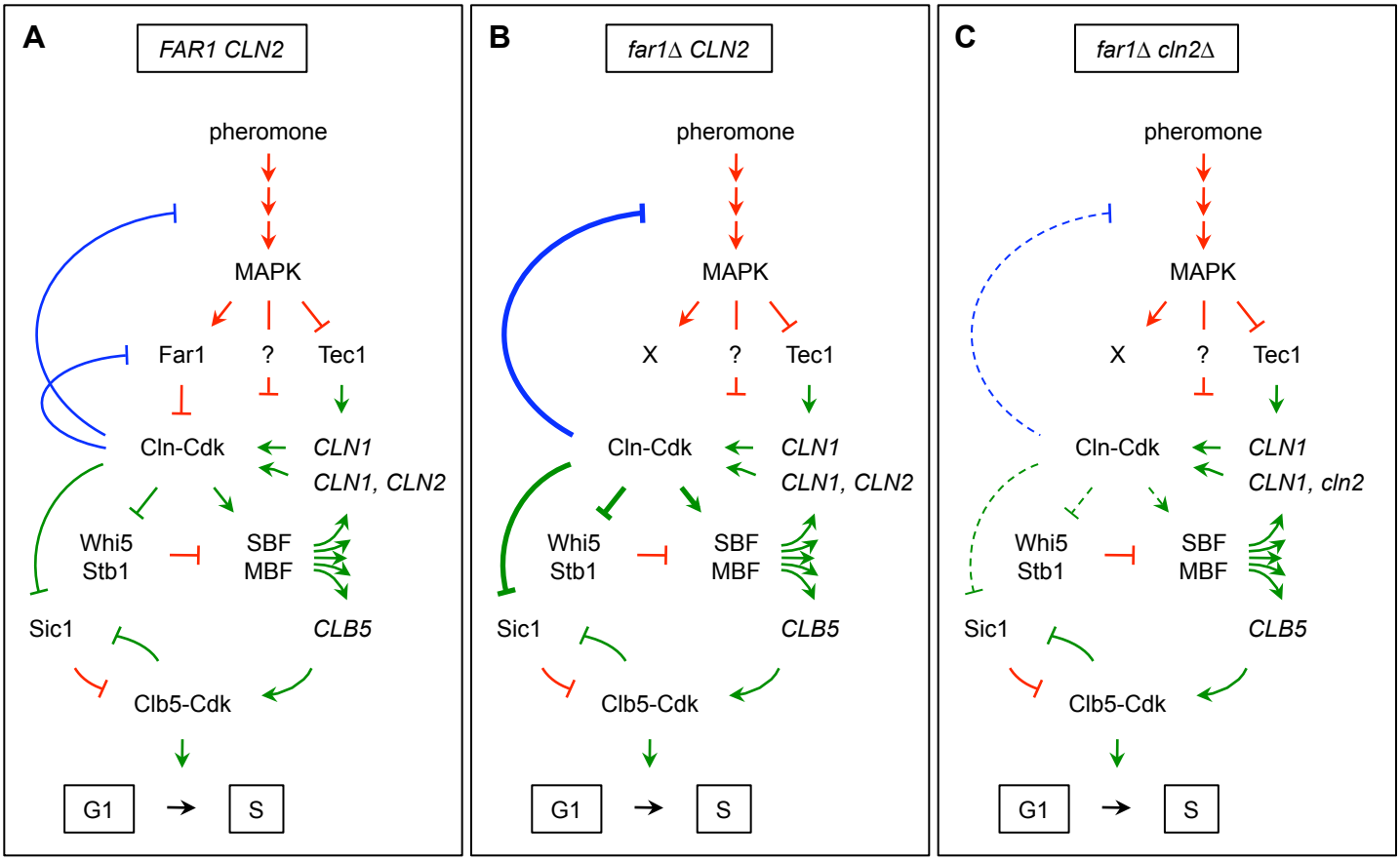

Figure S1. Detailed illustration of regulatory pathways contributing to either pheromone arrest or cell cycle entry. As in Figure 8, regulatory effects that inhibit or promote the G1/S transition are indicated in red or green, respectively. In addition, inhibitory effects of Cln-Cdk activity on the pheromone pathway are indicated in blue. The question marks indicate that, in addition to regulating Far1 and Tec1, the pheromone-activated MAPK may cause post-translational effects that interfere with the synthesis and/or stability of cyclin proteins (see Discussion).
(**A**) The pheromone pathway and the cell cycle are mutually antagonistic. In wild-type cells, the ability of pheromone to cause G1 arrest is likely dependent on whether the pheromone signal is received prior to the accumulation of Cln-Cdk activity.
(**B**) In *far1*Δ *CLN2* cells, uninhibited Cln-Cdk can more potently drive events that promote the G1/S transition (green arrows) and that inhibit pheromone signaling (blue inhibitory arrow), resulting in resistance to pheromone arrest.
(**C**) In *far1*Δ *cln2*Δ cells, the loss of Cln2-Cdk activity can allow other pheromone-induced effects to effectively antagonize the G1/S transition, in a manner dependent on Tec1 destruction and the activities of Whi5/Stb1 and Sic1.