Kar9 pathway: asymmetric cell division

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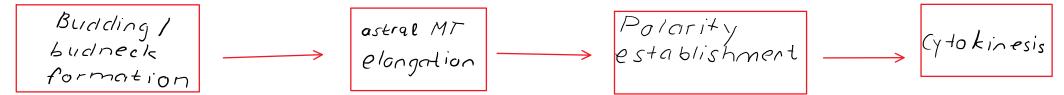
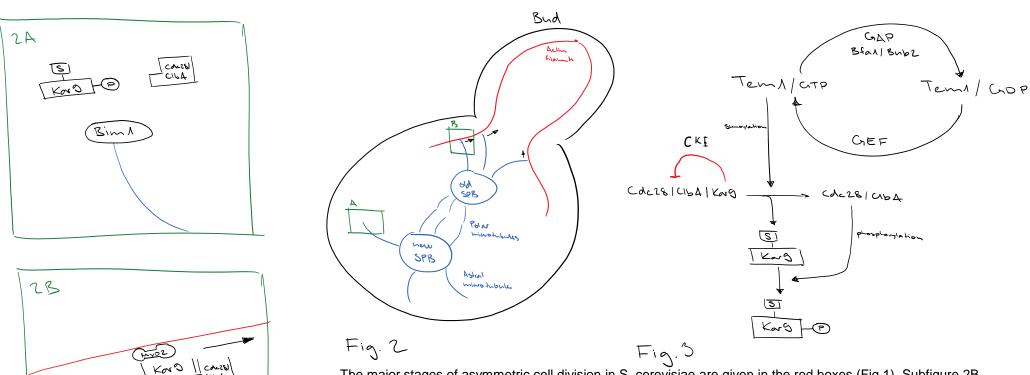


Fig. 1



The major stages of asymmetric cell division in S. cerevisiae are given in the red boxes (Fig.1). Subfigure 2B illustrates in detail the association of Kar9 to actin. Subfigure 2A displays the dissociation state of the phosphorylated and sumoylated Kar9. Kar9 is phosphorylated (P) by Cdc28-Cb4 and sumoylated (S) by Tem1 (GTPase), which is under control of GTPase activating protein (GAP) (Bfa1/Bub2). GAP is more active on the old spindle pole body (SPB). In Figure 3, the flow diagram gives a detailed overview of the regulation mechanism in the Kar9 pathway. CKI stands for Cyclin kinase inhibitor.

The nuclear envelope is omitted for a better overview.

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