

**Figure S1** Schematic representation of cAMP and MAPK pathways. The network was characterized into four different modules. *Module 1*: Upstream regulation of Mep2 by ammonium sulphate concentration. *Module 2*: Ras2 activation involving Cdc25 and Ira1, where Ira1 is regulated by Mep2 and Cdc25 by Kss1 of MAPK cascade. *Module 3*: upstream regulation of Gpa2 by Mep2, which involves removal of Gpb1/2 inhibition. *Module 4*: A network comprising of cAMP and MAPK pathways

