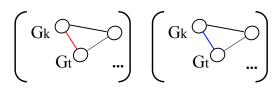**A**

B

Subnetwork i   Subnetwork j

S3 Fig. A diagram illustrating the process of gene co-expression subnetwork identification by COAC. (**A**) Each co-expression sub-network can be treated as a superposition of two different gene expression state. (**B**) The gene co-expression relationship can be represented by different subnetworks.