Network Biology: “The Polarity Sub-Network in the Yeast Network of Protein-Protein Interactions” by Paris L and Bazzoni G (Mario Negri Institute of Pharmacological Research, Italy; e-mail:

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Online Supplementary Materials

Online material 1. List of protein-protein interactions in the polarity network.

Online material 2. Error analysis.

Online material 3. Removal of the most connected proteins does not cause massive fragmentation of the polarity network. To quantify fragmentation of the polarity (a) and random (b) network under either

targeted removal of the most connected proteins (solid) or non-targeted removal of proteins regardless of connectivity (open), the relative size S of the largest cluster is expressed as function of the fraction

f of removed nodes (i.e., if f=0, then S=1).

Online material 4. Clustering the all-pairs shortest paths within the polarity network identifies five clusters of proteins. Proteins within the individual clusters are colour-coded as in Fig. 2. Each panel shows

the proteins belonging to that cluster and their first neighbours. Solid red and dotted blue lines indicate intra-cluster and inter-cluster interactions, respectively.

Online material 5. Correspondence between protein clusters and functional modules.