

protein name	% paths					
	tertiary		quaternary		global	
	homo	het	homo	het	homo	het
AraC	0%	-	0%	-	0%	-
ArgR	100%	-	0%	-	100%	-
MetR	50%	0%	0%	0%	50%	0%
TetR	0%	0%	100%	100%	100%	100%
anthranilate synthase	29%	50%	29%	50%	100%	100%
ATP sulfurylase	0%	0%	33%	0%	100%	100%
ATP-PRT	30%	0%	50%	0%	100%	100%
ATCase	25%	0%	0%	0%	25%	0%
caspase	100%	-	0%	-	100%	-
chorismate mutase	0%	0%	100%	100%	100%	100%
DAHPh synthase	50%	25%	50%	25%	100%	100%
FBPase-1	100%	100%	0%	0%	100%	100%
GTP cyclohydrolase I	100%	100%	40%	15%	100%	100%
glcN-6-P deaminase	20%	0%	50%	0%	100%	100%
glycogen phosphorylase	50%	0%	50%	50%	100%	100%
hemoglobin	33%	-	0%	-	100%	-
lactate DH	100%	100%	50%	0%	100%	100%
NAD-malic enzyme	17%	0%	50%	0%	50%	0%
phosphofructokinase	0%	25%	50%	25%	100%	100%
phosphoglycerate DH	8%	0%	100%	100%	100%	100%
PTP1B	-	0%	-	0%	-	100%
uracil PRT	100%	100%	50%	0%	100%	100%
hits ($\geq 20\%$ of paths)	70%	39%	70%	39%	96%	83%
hits (all paths)	26%	22%	22%	17%	83%	83%

Table S1: Homotropic and heterotropic connectivity in 22 proteins

“Tertiary network” refers to the contact rearrangement network and “quaternary network” refers to the quaternary subgraph of the global communication network (GCN_Q). “Homo” refers to substrate-substrate and effector-effector paths, and “hetero” refers to substrate-effector paths.