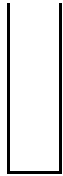


Table S2. Corresponding GO IDs and GO terms for Figure S3. All GO categories are presented in a hierarchical structure paralleling the DAG (directed acyclic graph) figure. In each row, the first number corresponds to “#” in Tables 2 and S3.

BP	1	GO:0008152	metabolic process	
	9	GO:0009058	biosynthetic process	
		24	GO:0008610	lipid biosynthetic process
		25	GO:0009059	macromolecule biosynthetic process
		48	GO:0006412	translation
	10	GO:0044238	primary metabolic process	
		26	GO:0019538	protein metabolic process
		49	GO:0006464	protein modification process
		63	GO:0043687	post-translational protein modification
		68	GO:0006470	protein amino acid dephosphorylation
		27	GO:0005975	carbohydrate metabolic process
	11	GO:0006091	generation of precursor metabolites and energy	
		28	GO:0006118	electron transport
		29	GO:0006119	oxidative phosphorylation
	12	GO:0043170	macromolecule metabolic process	
		30	GO:0065003	macromolecular complex assembly
	13	GO:0044237	cellular metabolic process	
		31	GO:0006139	nucleobase, nucleoside, nucleotide and nucleic acid metabolic process
		50	GO:0016070	RNA metabolic process
		32	GO:0006066	alcohol metabolic process
	2	GO:0009987	cellular process	
		14	GO:0007154	cell communication
		33	GO:0007165	signal transduction
		51	GO:0007166	cell surface receptor linked signal transduction
	64	GO:0007219	Notch signaling pathway	
	34	GO:0007242	intracellular signaling cascade	
	52	GO:0007243	protein kinase cascade	
	65	GO:0007249	I-kappaB kinase/NF-kappaB cascade	
3	GO:0051234	establishment of localization		
	15	GO:0045184	establishment of protein localization	
	35	GO:0015031	protein transport	

CC	4	GO:0043226	organelle	
	16	GO:0043227	membrane-bounded organelle	
	36	GO:0043231	intracellular membrane-bounded organelle	
		53	GO:0005739	mitochondrion
		54	GO:0016023	cytoplasmic membrane-bound vesicle
	17	GO:0043228	non-membrane-bounded organelle	
	37	GO:0043232	intracellular non-membrane-bounded organelle	
		55	GO:0005840	ribosome
MF	5	GO:0030528	transcriptional regulator activity	
		18	GO:0003700	transcription factor activity
	6	GO:0005215	transporter activity	
	19	GO:0015075	ion transmembrane transporter activity	
		38	GO:0005216	ion channel activity
		39	GO:0008324	cation transmembrane transporter activity
		56	GO:0015077	monovalent inorganic cation transmembrane transporter activity
		66	GO:0015078	hydrogen ion transporter activity
	7	GO:0060089	molecular transducer activity	
	20	GO:0004871	signal transducer activity	
		40	GO:0004872	receptor activity
	8	GO:0003824	catalytic activity	
	21	GO:0016740	transferase activity	
		41	GO:0016772	transferase activity, transferring phosphorus-containing groups
		57	GO:0016779	nucleotidyltransferase activity
22	GO:0016787	hydrolase activity		
	42	GO:0008233	peptidase activity	
	43	GO:0016818	hydrolase activity, acting on acid anhydrides, in phosphorus-containing anhydrides	
	58	GO:0016462	pyrophosphatase activity	
	67	GO:0017111	nucleoside-triphosphatase activity	
	69	GO:0003924	GTPase activity	
	44	GO:0016788	hydrolase activity, acting on ester bonds	
	59	GO:0004518	nuclease activity	
23	GO:0016491	oxidoreductase activity		
	45	GO:0016651	oxidoreductase activity, acting on NADH or NADPH	
	60	GO:0003954	NADH dehydrogenase activity	



- 46 GO:0016675 oxidoreductase activity, acting on heme group of donors
- 61 GO:0004129 cytochrome-c oxidase activity
- 47 GO:0016679 oxidoreductase activity, acting on diphenols & related substances as donors
- 62 GO:0008121 ubiquinol-cytochrome-c reductase activity

