

Supplemental Table 2. Arabidopsis thaliana coexpression clusters (r >= 0.86)

Cluster	# of genes predominant function (BP)	predominant function (CC)	predominant function (MF)
1	480 photosynthesis	plastid	peptidyl-prolyl cis-trans isomerase activity
2	138 cell wall modification	endomembrane system	pectinesterase activity
3	92 protein biosynthesis	ribosome	structural constituent of ribosome
4	91 response to oxidative stress	endomembrane system	oxidoreductase activity, acting on peroxide as acceptor
5	73 tRNA aminoacylation for protein translation	chloroplast	purine nucleotide binding
6	61 transport	n.s.	carrier activity
7	39 seed development	protein body	nutrient reservoir activity
8	34 response to oxidative stress	cell wall	peroxidase activity
9	34 n.s.	n.s.	n.s.
10	27 n.s.	chloroplast	n.s.
11	22 lipid transport	membrane	Mol Funct lipid binding
12	22 response to toxin	n.s.	alpha-glucosidase activity
13	26 microtubule-based process	microtubule cytoskeleton	microtubule motor activity
14	27 n.s.	n.s.	lipase activity
15	21 protein modification	endomembrane system	kinase activity
16	17 n.s.	endomembrane system	copper ion binding
18	12 n.s.	n.s.	n.s.
19	15 n.s.	n.s.	n.s.
20	15 seed development	n.s.	n.s.
21	13 n.s.	n.s.	phosphotransferase activity, alcohol group as acceptor
22	12 n.s.	chloroplast stroma	n.s.
23	11 thiamin biosynthesis	cytoplasm	n.s.
24	12 protein biosynthesis	ribosome	structural constituent of ribosome
25	11 n.s.	anchored to membrane	superoxide-generating NADPH oxidase activity
28	10 n.s.	n.s.	n.s.
29	10 cell wall organization and biogenesis (see)	cell surface (sensu Magnoliophyta)	structural constituent of cell wall
34	11 n.s.	chloroplast envelope	oxidoreductase activity, acting on hydrogen as donor, NAD or NADP as acceptor
35	11 phenylalanyl-tRNA aminoacylation	cytoplasmic part	phosphoglycerate kinase activity

* p < 0.05 (Benjamini & Hochberg FDR correction)

** clusters with 10 genes