













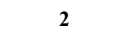







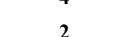





Supplemental table 4. Complete list of quantifications for all type of comparative proteomics technique applied in this study. The quantification results were sorted following their functional classification.

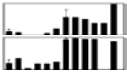


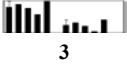
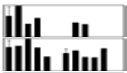
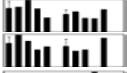
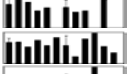
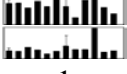

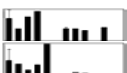
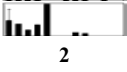










ID number	Exp. Type (a)	Protein Name	Accession Number	M/BS ratio (sd) (b)	BS/M ratio (sd) (c)	BS/M ratio (d)	observations (e)	spot number (f)
1	UN-LC1	Ferredoxin [2Fe-2S] (Fd2)	TC223586		4.1(± 0.7)	4.10	2	
1	UN-LC2	Ferredoxin [2Fe-2S] (Fd2)	TC223586		2.9(± 0.3)	2.90		
2	2D-LC ICAT	Ferredoxin I	TC220059	5.1(± 0.1)		0.20	2	
2	UN-LC1	Ferredoxin I	TC220059	1.9(± 0.1)		0.53	3	
2	UN-LC2	Ferredoxin I	TC220059	4.4(± 2.3)		0.23	3	
2	UN-LC2	Ferredoxin I	TC238105	3.5		0.29	1	
3	1D gel ICAT	ferredoxin reductase (FNR1)	TC219223	10.4(± 1)		0.10	3	
3	2D-LC ICAT	ferredoxin reductase (FNR1)	TC219223	7.6		0.13	1	
3	2D-Gel	ferredoxin reductase (FNR1)	TC219223 TC219224	2.1		0.48		206
3	2D-Gel	ferredoxin reductase (FNR1)	TC219223, TC219224	5.7		0.18		215
3	UN-LC2	ferredoxin reductase (FNR1)	TC219223, TC219226	6.1		0.16	1	
3	UN-LC1	ferredoxin reductase (FNR1)	TC219224	3.5(± 0.8)		0.29	2	
3	2D-LC ICAT	ferredoxin reductase (FNR1)	TC219226, TC219223	7(± 0.3)		0.14	2	
4	2D-LC ICAT	Plastocyanin (PC-2)	TC219293	3.0		0.33	1	
4	UN-LC2	Plastocyanin (PC-2)	TC219293	1.8(± 0.2)		0.56	2	
4	UN-LC1	Plastocyanin (PC-2)	TC219295		1.7(± 0.5)	1.70	2	
4	UN-LC2	Plastocyanin (PC-2)	TC219295	2.1(± 0.3)		0.48	2	
5	2D-Gel	oxygen evolving enhancer 2 (OEE2)	TC235205	2.0		0.50		294
5	UN-LC2	oxygen evolving enhancer 2 (OEE2)	TC235205	4.3(± 0.4)		0.23	2	
5	2D-Gel	oxygen evolving enhancer 2 (OEE2)	TC235206	2.1		0.48		283
5	2D-Gel	oxygen evolving enhancer 2 (OEE2)	TC235206	1.5		0.67		286
5	UN-LC1	oxygen evolving enhancer 2 (OEE2)	TC235206		1.2(± 0.2)	1.20	3	
5	UN-LC2	oxygen evolving enhancer 2 (OEE2)	TC235206	3.7(± 0.2)		0.27	2	
5	2D-Gel	oxygen evolving enhancer 2 (OEE2)	TC235206, TC235205	2.4		0.42		290
6	1D gel ICAT	oxygen evolving enhancer protein 1 (OEE1)	TC233304	27.9(± 1.1)		0.04	4	
6	2D-LC ICAT	oxygen evolving enhancer protein 1 (OEE1)	TC233304	3.8		0.26	1	
7	UN-LC1	Oxygen-evolving enhancer protein 3-1 (OEE3-1)	TC219937	2.0		0.50	1	
7	UN-LC2	Oxygen-evolving enhancer protein 3-1 (OEE3-1)	TC219937, TC238011	7.7(± 0.1)		0.13	2	
8	2D-Gel	photosystem II protein W-like protein	TC238911	1.4		0.71		355
9	2D-Gel	Thylakoid luminal 29.8 kDa protein (OEE2-like TL30)	TC226969	1.9		0.53		292
10	2D-Gel	ATP synthase beta chain (β-CF1)	TC224055	1.7		0.59		89
10	2D-Gel	ATP synthase beta chain (β-CF1)	TC224055	1.5		0.67		90









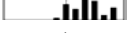












11	1D gel ICAT	phosphoglycolate phosphatase (AT5g36790)	TC229733	2.6(± 0.4)	2.60	2	
12	2D-LC ICAT	Fructose-1,6-bisphosphatase	TC224642,TC224643	3.5(± 0.1)	3.50	2	
12	UN-LC2	Fructose-1,6-bisphosphatase	TC224643	BS	10.00	1	
12	1D gel ICAT	Fructose-1,6-bisphosphatase	TC224643, TC224642	4.1(± 1)	4.10	3	
12	1D gel ICAT	Fructose-1,6-bisphosphatase	TC247511	3.7	3.70	1	
13	1D gel ICAT	Fructose-bisphosphate aldolase (1)	TC219359	9.4(± 0.3)	9.40	3	
13	2D-Gel	Fructose-bisphosphate aldolase (1)	TC219359	1.4	1.40		 169
13	2D-Gel	Fructose-bisphosphate aldolase (1)	TC219359	2.2	2.20		 209
13	2D-Gel	Fructose-bisphosphate aldolase (1)	TC219359	2.5	2.50		 194
13	2D-Gel	Fructose-bisphosphate aldolase (1)	TC219359	3.3	3.30		 433
13	2D-Gel	Fructose-bisphosphate aldolase (1)	TC219359	3.4	3.40		 757
13	2D-LC ICAT	Fructose-bisphosphate aldolase (1)	TC219359	4.7(± 0.1)	4.70	2	
13	UN-LC1	Fructose-bisphosphate aldolase (1)	TC219359	2.1	2.10	1	
13	UN-LC2	Fructose-bisphosphate aldolase (1)	TC219359	5.7(± 1.4)	5.70	5	
13	2D-Gel	Fructose-bisphosphate aldolase (2)	TC219361	BS	10.00		 187
14	1D gel ICAT	Glyceraldehyde 3-phosphate dehydrogenase A	TC219897	1.5(± 0.1)	1.50	3	
14	2D-Gel	Glyceraldehyde 3-phosphate dehydrogenase A	TC219897	1.9	1.90		 220
14	2D-Gel	Glyceraldehyde 3-phosphate dehydrogenase A	TC219897	2.0	2.00		 228
14	2D-Gel	Glyceraldehyde 3-phosphate dehydrogenase A	TC219897	3.7	3.70		 385
14	2D-Gel	Glyceraldehyde 3-phosphate dehydrogenase A	TC219897	5.8	5.80		 384
14	2D-Gel	Glyceraldehyde 3-phosphate dehydrogenase A	TC219897	BS	10.00		 381
14	2D-Gel	Glyceraldehyde 3-phosphate dehydrogenase A	TC219897	BS	10.00		 629
14	2D-Gel	Glyceraldehyde 3-phosphate dehydrogenase A	TC219897	BS	10.00		 630
14	2D-LC ICAT	Glyceraldehyde 3-phosphate dehydrogenase A	TC219897	1.1(± 0.2)	1.10	4	
14	UN-LC1	Glyceraldehyde 3-phosphate dehydrogenase A	TC219897	1.5(± 0.3)	0.67	2	
14	UN-LC2	Glyceraldehyde 3-phosphate dehydrogenase A	TC219897	1.4(± 0.2)	1.40	5	
15	1D gel ICAT	glyceraldehyde-3-phosphate dehydrogenase (B)	TC234510	4.6(± 0.4)	0.22	4	
15	2D-Gel	M (glyceraldehyde-3-phosphate dehydrogenase (B)), BS (sedoheptulose-1,7-bisphosphatase)	M (TC234510), BS (TC239473)	2.5	2.50		 173
15	2D-LC ICAT	glyceraldehyde-3-phosphate dehydrogenase (B)	TC234510	4.8(± 0.4)	0.21	3	
15	UN-LC1	glyceraldehyde-3-phosphate dehydrogenase (B)	TC234510	2.5(± 0.5)	0.40	4	
15	UN-LC2	glyceraldehyde-3-phosphate dehydrogenase (B)	TC234510	3.1(± 0.4)	0.32	4	
15	2D-Gel	glyceraldehyde-3-phosphate dehydrogenase (B) (comigration FBA)	TC234510	2.2	0.45		 195
16	UN-LC1	Phosphoglycerate kinase	TC219624	1.1	1.10	1	
16	UN-LC2	Phosphoglycerate kinase	TC219624	1.1	1.10	1	
16	1D gel ICAT	Phosphoglycerate kinase	TC219624, TC219625 ,NP539335	2.4	0.42	1	
16	2D-Gel	Phosphoglycerate kinase	TC219624, TC219624, TC219203	2.0	0.50		 763
16	UN-LC1	Phosphoglycerate kinase	TC219625	6.2(± 3.4)	0.16	6	
16	UN-LC2	Phosphoglycerate kinase	TC219625	1.8	1.80	1	
16	UN-LC2	Phosphoglycerate kinase	TC219625	1.9(± 0.6)	0.53	6	
17	1D gel ICAT	Phosphoribulokinase	TC221089	17(± 1.1)	17.00	2	

17	2D-Gel	Phosphoribulokinase	TC221089	2.5	2.50		163
17	2D-LC ICAT	Phosphoribulokinase	TC221089	3(± 0.7)	3.00		2
17	UN-LC1	Phosphoribulokinase	TC221089	3.9(± 0.2)	3.90		2
17	UN-LC2	Phosphoribulokinase	TC221089	6(± 1.6)	6.00		4
17	1D gel ICAT	Phosphoribulokinase	TC221089, TC225896	15.9	15.90		1
17	2D-LC ICAT	Phosphoribulokinase	TC221089, TC225896	4.7	4.70		1
18	1D gel ICAT	ribulose-5-phosphate-3-epimerase	TC234954	6.3	6.30		1
18	2D-Gel	ribulose-5-phosphate-3-epimerase	TC234954	BS	10.00		770
18	UN-LC2	ribulose-5-phosphate-3-epimerase	TC234954	BS	10.00		1
19	2D-LC ICAT	RuBisCO Activase	TC223356	2.5	2.50		1
19	UN-LC2	RuBisCO Activase	TC223356	3.3(± 0)	3.30		2
19	1D gel ICAT	RuBisCO Activase	TC223356, TC237072	10.1(± 0.9)	10.10		2
19	2D-Gel	RuBisCO Activase	TC237072	1.6	1.60		113
19	2D-Gel	RuBisCO Activase	TC237072	2.1	2.10		132
20	2D-Gel	RuBisCO large subunit	BM336840	19.6	19.60		780
20	1D gel ICAT	RuBisCO large subunit	TC233714	11.8(± 1.4)	11.80		4
20	2D-Gel	RuBisCO large subunit	TC233714	30.0	30.00		776
20	2D-Gel	RuBisCO large subunit	TC233714	37.4	37.40		777
20	2D-Gel	RuBisCO large subunit	TC233714	BS	10.00		572
20	2D-LC ICAT	RuBisCO large subunit	TC233714	2.8(± 0.1)	2.80		4
20	UN-LC1	RuBisCO large subunit	TC233714	3.6(± 0.3)	3.60		2
20	UN-LC2	RuBisCO large subunit	TC233714	4.6(± 0)	4.60		5
20	2D-Gel	RuBisCO large subunit train	None	17.9	19.90		779
21	UN-LC1	RuBisCO small subunit	TC234038	1.6	1.60		1
21	1D gel ICAT	RuBisCO small subunit	TC234038, TC234963	40.0	40.00		1
21	1D gel ICAT	RuBisCO small subunit	TC234038, TC234963	18.4(± 1.3)	18.40		2
21	UN-LC2	RuBisCO small subunit	TC234038, TC234963	4.5	4.50		1
21	1D gel ICAT	RuBisCO small subunit	TC234040	16.5(± 1.3)	16.50		3
21	2D-Gel	RuBisCO small subunit	TC234040	3.0	3.00		784
21	2D-Gel	RuBisCO small subunit	TC234040	BS	10.00		773
21	2D-LC ICAT	RuBisCO small subunit	TC234040	3.6(± 0.1)	3.60		2
21	UN-LC1	RuBisCO small subunit	TC234040	2.3(± 0)	2.30		2
21	UN-LC2	RuBisCO small subunit	TC234040	7.2(± 1.1)	7.20		3
21	2D-LC ICAT	RuBisCO small subunit	TC234963	3.5(± 0.4)	3.50		5
21	2D-Gel	RuBisCO small subunit	TC234040	2.5	2.50		772
22	2D-Gel	sedoheptulose-1,7-bisphosphatase	TC239473	2.3	2.30		226
22	2D-LC ICAT	sedoheptulose-1,7-bisphosphatase	TC239473	4.3	4.30		1
22	1D gel ICAT	sedoheptulose-1,7-bisphosphatase	TC239473	14.1(± 1)	14.10		5
22	UN-LC1	sedoheptulose-1,7-bisphosphatase	TC239473	5.3(± 0)	5.30		2
22	UN-LC1	sedoheptulose-1,7-bisphosphatase	TC239473	BS	10.00		1
22	UN-LC2	sedoheptulose-1,7-bisphosphatase	TC239473	8.4	8.40		1

23	1D gel ICAT	transketolase	TC235000	7.2(± 0.1)	7.20	2		
23	2D-Gel	transketolase	TC235000	2.4	2.40			51
23	2D-Gel	transketolase	TC235000	BS	10.00			564
23	2D-LC ICAT	transketolase	TC235000	3.2(± 0.1)	3.20	2		
23	UN-LC1	transketolase	TC235000	3.9(± 0.6)	3.90	5		
23	UN-LC2	transketolase	TC235000	6.1(± 1)	6.10	5		
23	2D-Gel	transketolase train	TC235000	1.9	1.90			50
23	2D-Gel	transketolase train	TC235000	3.3	3.30			49
24	1D gel ICAT	Aldose-1-epimerase	TC237704	5.4(± 0.3)	5.40	3		
24	2D-Gel	Aldose-1-epimerase	TC237704	BS	10.00			786
24	UN-LC2	Aldose-1-epimerase	TC237704	5.9	5.90	1		
25	2D-Gel	Ribose-5-phosphate isomerase	TC221577	1.7	1.70			255
25	2D-Gel	Ribose-5-phosphate isomerase	TC221577	2.0	2.00			257
25	2D-Gel	Ribose-5-phosphate isomerase (dimer)	TC221577	2.4	2.40			55
26	2D-LC ICAT	Triosephosphate isomerase	TC233905	7.8(± 0.8)	0.13	2		
26	2D-Gel	Triosephosphate isomerase	TC233905, TC233906, TC233912	5.3	0.19			275
26	1D gel ICAT	Triosephosphate isomerase	TC233907	6.1	0.16	1		
26	UN-LC1	Triosephosphate isomerase	TC233907	3.4(± 0.2)	0.29	2		
26	UN-LC2	Triosephosphate isomerase	TC233907	5.2(± 1.1)	0.19	6		
26	1D gel ICAT	Triosephosphate isomerase	TC233912	8.9(± 2.4)	0.11	5		
26	2D-LC ICAT	Triosephosphate isomerase	TC233912	5.0	0.20	1		
26	UN-LC1	Triosephosphate isomerase	TC233912	5.1	0.20	1		
27	1D gel ICAT	NADP-dependent malic enzyme	TC234846	14.2(± 1.2)	14.20	2		
27	2D-Gel	NADP-dependent malic enzyme	TC234846	6.9	6.90			60
27	2D-LC ICAT	NADP-dependent malic enzyme	TC234846	3.8(± 0.1)	3.80	5		
27	UN-LC1	NADP-dependent malic enzyme	TC234846	3.4(± 1.9)	3.40	6		
27	UN-LC2	NADP-dependent malic enzyme	TC234846	5.5(± 1.7)	5.50	5		
27	2D-Gel	NADP-dependent malic enzyme	TC234846	9.4	9.40			33
28	1D gel ICAT	pyruvate,orthophosphate dikinase {Zea mays} (PPDK)	TC233444	6.6	0.15	1		
28	2D-Gel	pyruvate,orthophosphate dikinase {Zea mays} (PPDK)	TC233444	2.7	0.37			15
28	2D-LC ICAT	pyruvate,orthophosphate dikinase {Zea mays} (PPDK)	TC233444	5.3(± 0.7)	0.19	9		
28	UN-LC1	pyruvate,orthophosphate dikinase {Zea mays} (PPDK)	TC233444	10.7(± 4.1)	0.09	9		
28	UN-LC2	pyruvate,orthophosphate dikinase {Zea mays} (PPDK)	TC233444	3.4(± 0.7)	0.29	7		
29	UN-LC1	Malate dehydrogenase [NADP]	TC220999	7.9(± 1.8)	0.13	4		
29	UN-LC2	Malate dehydrogenase [NADP]	TC220999	5.3(± 0.1)	0.19	2		
29	1D gel ICAT	Malate dehydrogenase [NADP]	TC220999	16.4(± 3.7)	0.06	2		
29	2D-Gel	Malate dehydrogenase [NADP]	TC220999	3.1	0.32			144
29	2D-Gel	Malate dehydrogenase [NADP]	TC220999	2.2	0.45			141
29	2D-LC ICAT	Malate dehydrogenase [NADP]	TC220999	6.1(± 0.4)	0.16	3		
30	UN-LC2	Acyl carrier protein I (ACP1)	TC223112, TC228772	1.3	1.30	1		
31	2D-Gel	β-hydroxyacyl-ACP dehydratase	TC240700	MS	0.10			307

32	2D-Gel	S-malonyltransferase	TC223360	2.6		0.38		202
33	2D-Gel	lipid transfer 7a2b	AI966827	MS		0.10		359
34	2D-Gel	ferredoxin-nitrite reductase	TC222347	1.5		0.67		57
34	UN-LC1	ferredoxin-nitrite reductase	TC222347	2.5(± 0.3)		0.40	3	
34	UN-LC2	ferredoxin-nitrite reductase	TC222347	4(± 0.3)		0.25	2	
34	1D gel ICAT	ferredoxin-nitrite reductase	TC222347	5.8(± 1.4)		0.17	2	
34	2D-LC ICAT	ferredoxin-nitrite reductase	TC222347, TC222348	5.8		0.17	1	
35	UN-LC1	Ferredoxin-dependent glutamate synthase (Fd-GOGAT)	TC236410	4.7(± 3.6)		0.21	2	
35	UN-LC1	Ferredoxin-dependent glutamate synthase (Fd-GOGAT)	TC236410	MS		0.10	1	
36	2D-Gel	Glutamine synthetase (GS2)	TC220868	1.5		0.67		137
37	1D gel ICAT	Aspartate transaminase (ASP5 A.th)	TC219944	11.1(± 0.7)		0.09	4	
37	2D-Gel	Aspartate transaminase (ASP5 A.th)	TC219944	5.1		0.20		140
37	2D-Gel	Aspartate transaminase (ASP5 A.th)	TC219944	4.5		0.22		135
37	2D-Gel	Aspartate transaminase (ASP5 A.th)	TC219944	3.3		0.30		156
37	2D-Gel	Aspartate transaminase (ASP5 A.th)	TC219944	3.1		0.32		143
37	2D-Gel	Aspartate transaminase (ASP5 A.th)	TC219944	2.1		0.48		138
37	2D-LC ICAT	Aspartate transaminase (ASP5 A.th)	TC219944	5.7(± 0.2)		0.18	2	
37	UN-LC1	Aspartate transaminase (ASP5 A.th)	TC219944	2.5(± 0.8)		0.40	3	
37	UN-LC2	Aspartate transaminase (ASP5 A.th)	TC219944	5.7(± 0.3)		0.18	3	
38	2D-Gel	Lactoylglutathione lyase	TC234316	1.0		1.00		297
39	1D gel ICAT	Ketol-acid reductoisomerase	TC219885	1.9		0.53	1	
40	2D-Gel	3-isopropylmalate dehydrogenase	TC220615, TC234316	2.5		0.40		124
40	2D-Gel	3-isopropylmalate dehydrogenase	TC220616	1.8		0.56		368
41	2D-Gel	Cysteine synthase 1	TC235388, TC235390	1.6		0.63		211
42	2D-Gel	ATP sulfurylase 2	TC235924		1.7	1.70		118
42	2D-Gel	ATP sulfurylase 2	TC235924		2.2	2.20		72
43	1D gel ICAT	1-deoxy-d-xylulose-5-phosphate reductoisomerase	TC238092	MS		0.10	1	
44	2D-Gel	TC227295 unknown	TC227295		2.9	2.90		190
44	2D-Gel	TC227295 unknown	TC227295		BS	10.00		627
45	1D gel ICAT	lipoxygenase (LOX1)	AW157962	MS		0.10	1	
45	2D-LC ICAT	lipoxygenase (LOX1)	AW157962	7.3		0.14	1	
45	1D gel ICAT	lipoxygenase (LOX2)	TC234252	9.9(± 0.8)		0.10	4	
45	1D gel ICAT	lipoxygenase (LOX2)	TC234252	MS		0.10	1	
45	UN-LC1	lipoxygenase (LOX2)	TC234252	4.9(± 0.7)		0.20	3	
45	UN-LC2	lipoxygenase (LOX2)	TC234252	5.0		0.20	1	
45	2D-LC ICAT	lipoxygenase (LOX2)	TC234252	7.1(± 0)		0.14	2	
45	1D gel ICAT	lipoxygenase (LOX2)	TC237970	9.7(± 0.3)		0.10	2	
45	UN-LC1	lipoxygenase (LOX2)	TC237970	6.2(± 5.8)		0.16	4	
45	UN-LC2	lipoxygenase (LOX2)	TC237970	4.2(± 0.2)		0.24	3	
45	2D-LC ICAT	lipoxygenase (LOX2)	TC237970	7.6(± 0.5)		0.13	3	

45	UN-LC1	lipoxygenase (LOX2)	TC237971	5.9(± 0)		0.17	2
46	1D gel ICAT	δ-aminolevulinic acid dehydratase	TC240729	1.3(± 0.3)		0.77	2
47	1D gel ICAT	Glutamate-1-semialdehyde 2,1-aminomutase	TC227768	2.5		0.40	1
48	1D gel ICAT	Magnesium-chelatase subunit I (chlI)	TC223168	5.3		0.19	1
49	2D-LC ICAT	ADP-glucose pyrophosphorylase (small)	TC232071		1.7(± 0.1)	1.70	3
50	UN-LC2	ADP-glucose pyrophosphorylase (large)	TC222533		BS	10.00	1
50	2D-Gel	ADP-glucose pyrophosphorylase (large)	TC222533, TC242174		4.5	4.50	 98
50	2D-Gel	ADP-glucose pyrophosphorylase (large)	TC222533, TC242174		4.6	4.60	 99
51	1D gel ICAT	soluble starch synthase	TC236897		3.3	3.30	1
52	1D gel ICAT	unknown (adenyl cyclase domain)	TC235467		1.1	1.10	1
53	1D gel ICAT	heat-shock protein 82K (HSP90)	TC221632	2.3		0.43	1
54	2D-Gel	Ferredoxin- thioredoxin reductase subunit A (FTR-A)	AZM4_47023	MS		0.10	 331
55	UN-LC1	Thioredoxin-M2	TC228810	4.2(± 1.3)		0.24	3
55	2D-Gel	Thioredoxin-M2, -M4	TC228810, TC221334	3.3		0.30	 441
55	UN-LC2	Thioredoxin-M4	TC221334	2.6(± 1.6)		0.38	3
55	2D-LC ICAT	Thioredoxin-M4	TC224103		2.4	2.40	1
55	2D-LC ICAT	Thioredoxin-M4	TC238760	2.2(± 0.2)		0.45	2
55	2D-Gel	Thioredoxin-M4, -F	TC221334, TC220464	MS		0.10	 348
55	2D-Gel	Thioredoxin-M4, -M2	TC221334, TC228810	1.4		0.71	 340
55	2D-Gel	Thioredoxin-M4, -M2	TC221334, TC228810	1.2		0.83	 347
56	2D-Gel	glutathione-disulfide reductase	TC227052	1.2		0.83	 78
56	2D-Gel	glutathione-disulfide reductase	TC227052		1.6	1.60	 79
57	1D gel ICAT	glutaredoxin	TC225992	3.5		0.29	1
58	2D-LC ICAT	2-cys peroxiredoxin-like (2CysB)	TC234345	2.1		0.48	1
58	UN-LC1	2-cys peroxiredoxin-like (2CysB)	TC234345	2.4		0.42	1
58	UN-LC2	2-cys peroxiredoxin-like (2CysB)	TC234345,TC234346	1.7(± 0.4)		0.59	5
58	2D-Gel	2-cys peroxiredoxin-like (2CysB)	TC234346	1.8		0.56	 341
58	2D-Gel	2-cys peroxiredoxin-like (2CysB)	TC234346	MS		0.10	 309
58	UN-LC1	2-cys peroxiredoxin-like (2CysB)	TC234346	5.1(± 4.3)		0.20	2
58	2D-Gel	2-cys peroxiredoxin-like (2CysB)	TC234346, TC234345	4.8		0.21	 291
58	2D-Gel	2-cys peroxiredoxin-like (2CysB)	TC234346, TC234345, 8351.t03120	7.0		0.14	 288
58	2D-Gel	2-cys peroxiredoxin-like (2CysB) (DIMER)	TC234346		1.1	1.10	 362
58	2D-Gel	2-cys peroxiredoxin-like (2CysB) (DIMER?)	TC234345, TC234346	2.6		0.38	 459
58	2D-Gel	2-cys peroxiredoxin-like (2CysB) (DIMER?)	TC234345, TC234346	4.2		0.24	 125
59	2D-Gel	Peroxiredoxine-like (II-E)	TC223042	6.9		0.14	 324
59	2D-Gel	Peroxiredoxine-like (II-E)	TC223042	4.0		0.25	 315
59	2D-Gel	Peroxiredoxine-like (II-E)	TC223042	3.9		0.26	 313
59	UN-LC1	Peroxiredoxine-like (II-E)	TC223042	2.6(± 1.4)		0.38	3
59	UN-LC2	Peroxiredoxine-like (II-E)	TC223042	1.4		0.71	1
59	2D-Gel	Peroxiredoxine-like (II-E)	TC223042	6.1		0.16	 311
60	2D-Gel	Superoxide dismutase [Cu-Zn]	TC237182	1.3		0.77	 342

60	UN-LC1	Superoxide dismutase [Cu-Zn]	TC237182	1.5(± 0.4)		0.67	3	
60	UN-LC2	Superoxide dismutase [Cu-Zn]	TC237182	2.4(± 0.7)		0.42	6	
61	UN-LC1	Adenylate kinase	TC236532	2.2(± 0.7)		0.45	3	
61	2D-Gel	Adenylate kinase	TC236532,TC236534	2.8		0.36		271
61	UN-LC2	Adenylate kinase	TC236532,TC236534	3.6(± 1.2)		0.28	3	
61	2D-Gel	Adenylate kinase	TC236534	3.8		0.26		264
61	2D-Gel	Adenylate kinase (dimeric)	TC236532, AZM4_132465	5.0		0.20		108
62	2D-Gel	inorganic pyrophosphatase-like	TC218860	1.4		0.71		241
62	UN-LC1	inorganic pyrophosphatase-like	TC218860	2.8(± 0.3)		0.36	2	
62	UN-LC2	inorganic pyrophosphatase-like	TC218860	1.8(± 0.3)		0.56	5	
63	2D-Gel	nucleoside diphosphate kinase II	TC238875	5.6		0.18		448
64	UN-LC2	thylakoid lumenal 17.4 kD protein	TC224315	5.7		0.18	1	
65	2D-Gel	β-D-glucosidase	TC220472		6.8	6.80		77
65	2D-Gel	β-D-glucosidase	TC220472		8.3	8.30		458
65	2D-Gel	β-D-glucosidase	TC220472		BS	10.00		679
65	2D-Gel	β-D-glucosidase	TC220472		BS	10.00		680
65	UN-LC1	β-D-glucosidase	TC220472		31.0	31.00	1	
65	UN-LC1	β-D-glucosidase	TC220472		BS	10.00	1	
65	UN-LC1	β-D-glucosidase	TC220472		BS	10.00	1	
65	UN-LC2	β-D-glucosidase	TC220472		BS	10.00	1	
66	1D gel ICAT	plastid-lipid associated protein PAP3	TC237165	MS		0.10	1	
67	1D gel ICAT	glutathione S-transferase (GST10)	TC222544	2.2(± 0.1)		0.45	3	
67	2D-Gel	glutathione S-transferase (GST10)	TC222544	2.4		0.42		278
67	2D-Gel	glutathione S-transferase (GST10)	TC222544	1.9		0.53		276
68	UN-LC2	unknown SET1 domain protein	TC224607		6.7	6.70	1	
69	2D-Gel	mRNA binding protein (Csp41a-like)	AZM4_135414		1.9	1.90		785
70	UN-LC1	nucleic acid-binding protein Cp31a	TC235457	1.8(± 0.3)		0.56	2	
70	2D-Gel	nucleic acid-binding protein Cp31a	TC235457, TC235458	2.2		0.45		232
70	2D-Gel	nucleic acid-binding protein Cp31a	TC235457, TC235458	1.8		0.56		231
71	2D-Gel	nucleic acid-binding protein Cp33	TC236626	3.1		0.32		222
71	UN-LC1	nucleic acid-binding protein Cp33	TC236626	1.8(± 0.7)		0.56	4	
71	UN-LC2	nucleic acid-binding protein Cp33	TC236626	2(± 0.2)		0.50	3	
72	2D-Gel	plastid-specific ribosomal protein 2 (RP-2)	TC238798	3.5		0.29		282
73	2D-Gel	ribosomal protein L1	TC219835	1.0		1.00		200
74	2D-Gel	ribosomal protein L12.1	TC222916	MS		0.10		319
74	UN-LC1	ribosomal protein L12.1	TC222916	3.7(± 2.5)		0.27	2	
74	UN-LC2	ribosomal protein L12.1	TC222916	3.6(± 0.1)		0.28	2	
75	2D-Gel	ribosomal protein S1	TC221841	MS		0.10		117
75	2D-Gel	ribosomal protein S1	TC221841	MS		0.10		122
75	2D-Gel	ribosomal protein S1	TC221841	MS		0.10		146
76	UN-LC1	ribosomal protein S5	TC239133	3.1		0.32	1	

76	2D-Gel	ribosomal protein S5 (RP-S5), enoyl-acyl carrier MIX	TC239133, TC235751	1.1		0.91		205
77	2D-Gel	ribosomal protein L10	TC224551, BM079225	MS		0.10		306
78	2D-Gel	Elongation factor P (EF-P)	TC237934	1.1		0.91		304
79	2D-Gel	elongation factor Tu	TC222181, TC226641	2.6		0.38		123
79	2D-Gel	elongation factor Tu	TC222181, TC226641	2.3		0.43		133
79	2D-Gel	elongation factor Tu	TC222181, TC226641	2.2		0.45		121
79	1D gel ICAT	elongation factor Tu	TC220034	4.5		0.22	1	
79	2D-LC ICAT	elongation factor Tu	TC220034	3.7		0.27	1	
79	1D gel ICAT	elongation factor Tu	TC222181	4.3(± 0.3)		0.23	2	
79	2D-LC ICAT	elongation factor Tu	TC222181	3.3(± 0.3)		0.30	3	
79	UN-LC1	elongation factor Tu	TC222181	6.2(± 0.7)		0.16	3	
79	1D gel ICAT	elongation factor Tu	TC222182	3.9		0.26	1	
79	2D-LC ICAT	elongation factor Tu	TC222182	3.1		0.32	1	
79	UN-LC1	elongation factor Tu	TC226641	6.6(± 0)		0.15	2	
79	UN-LC2	elongation factor Tu	TC226641	2.4		0.42	1	
80	2D-Gel	elongation factor G (Ef-G)	TC222353	7.9		0.13		26
80	2D-Gel	elongation factor G (Ef-G) TRAIN	TC222353	5.6		0.18		36
81	2D-Gel	PETs	TC226754	7.0		0.14		6
82	2D-Gel	Ribosome recycling factor	TC237618	1.2		0.83		771
83	2D-Gel	Membrane-associated 30 kDa protein (Vipp1)	TC220737	MS		0.10		245
84	1D gel ICAT	ClpP protease (ClpP1?)	TC225197	3.3		0.30	1	
84	2D-Gel	ClpP protease (ClpP1?)	TC245457, TC225197	1.7		0.59		261
85	1D gel ICAT	Chaperonin 60 (β-Cpn60)	TC219522	1.1		0.91	1	
85	2D-Gel	Chaperonin 60 (β-Cpn60)	TC219522	1.2		0.83		47
85	2D-LC ICAT	Chaperonin 60 (β-Cpn60)	TC219522		1.1(± 0.1)	1.10	2	
85	2D-Gel	Chaperonin 60 (β-Cpn60)	TC219523, TC219522		1.2	1.20		67
86	2D-Gel	Chaperonin 20 (Cpn21)	TC233810, TC236117	1.0		1.00		273
86	2D-Gel	Chaperonin 20 (Cpn21) train	train 273	1.2		0.83		274
87	2D-Gel	Chaperonin 60 (α-Cpn60)	TC220350, TC235184, TC236031	1.5		0.67		66
87	2D-Gel	Chaperonin 60 (α-Cpn60) Train	Unknown	1.3		0.77		68
88	2D-Gel	Chaperonin 70 (DnaK)	TC220215, TC235785	1.2		0.83		43
88	1D gel ICAT	Chaperonin 70 (DnaK)	TC220215, TC235785	1.7(± 0.03)		0.59	2	
88	UN-LC1	Chaperonin 70 (DnaK)	TC235785	6.4		0.16	1	
89	2D-Gel	GrpE	TC222867	5.3		0.19		454
90	2D-Gel	peptidyl-prolyl cis-trans isomerase (TLP21)	TC228225	2.0		0.50		316
90	2D-Gel	peptidyl-prolyl cis-trans isomerase (TLP21)	TC228225	MS		0.10		314
91	2D-Gel	peptidyl-prolyl cis-trans isomerase (Tlp40)	TC239826	2.8		0.36		154
92	2D-LC ICAT	ClpC Hsp100 (ClpC1)	TC235372	2.5		0.40	1	
93	UN-LC1	FK506 binding protein 1	TC247336		5.1	5.10	1	
94	2D-Gel	Vacuolar ATP synthase subunit C (VATC_ARATH)	TC249232	MS		0.10		450
94	2D-Gel	Vacuolar ATP synthase subunit C (VATC_ARATH)	TC249232	1.7		0.59		323

95	2D-Gel	ABC transporter putative	TC223951	MS	4.2(± 1.1)	0.10		244	
96	UN-LC2	CP12 protein precursor	TC223290			4.20	4		221
97	2D-Gel	SHOOT1 protein	TC238048	3.2		0.31		223	
97	2D-Gel	SHOOT1 protein	TC238048	2.6		0.38		224	
97	2D-Gel	SHOOT1 protein	TC238048	1.8		0.56		1	
97	UN-LC1	SHOOT1 protein	TC238048	5.8		0.17	1		
98	1D gel ICAT	unknown protein TC236586	TC236586	3.2(± 0.1)		0.31	2		
99	1D gel ICAT	aldo/keto reductase family protein	TC220484	3.3		0.30	1		
100	1D gel ICAT	unknown protein TC220929	TC220929	25.8		0.04	1		
101	2D-Gel	Fruit protein PKIWI502	TC222257	3.1		0.32		248	
101	2D-LC ICAT	Fruit protein PKIWI502	TC222257	3.3	0.30	1			
101	UN-LC1	Fruit protein PKIWI502	TC222257	1.4(± 0.4)	0.71	2			
102	2D-Gel	inositol monophosphate family protein	TC238795		BS	10.00		634	
103	2D-Gel	unknown TC230439	TC230439	2.6		0.38		303	
104	2D-Gel	Y230_ARATH	TC235613	2.7		0.37		253	
104	2D-Gel	Y230_ARATH	TC235613	2.7		0.37		252	
104	UN-LC1	Y230_ARATH	TC235613	2.8(± 1)		0.36	3		
104	2D-Gel	Y230_ARATH	TC235613, TC235612, 8353.t00098	2.7		0.37		254	
105	2D-Gel	AT4g15940-like unknown	TC220990	1.7		0.59		260	
106	2D-Gel	unknown CF032674	CF032674			1.9	1.90		256
106	2D-Gel	unknown CF032674	CF032674	MS		0.10		251	

(a) Unlabeled LC quantifications (UN-LC), 1D SDS-PAGE followed by ICAT (1D-gel ICAT), ICAT followed by 2D-LC fractionation (2D-LC-ICAT) and 2DE IPG followed by SDS-PAGE in second dimension (2D-Gel).

(b) Mesophyll/Bundle Sheath accumulation ratios with standard deviation.

(c) Bundle Sheath/Mesophyll accumulation ratios with standard deviation.

(d) Bundle Sheath/Mesophyll accumulation ratios

(e) The graphs represents, from left to the right: 1: M averaged spot volume (the standard deviation is indicated), 2 to 6: normalized M spots volumes from 5 gels, 7: BS averaged spot volume (the standard deviation is indicated), 8-12: normalized M spots volumes from 5 gels. For the non-2-DE gel based methods the ratio M/BS is indicated with the standard deviation in brackets. The number of averaged peptides is also indicated.

(f) Spot numbers for the 2DE Gels experiment are indicated