

Supplementary data

Comparative proteomic analysis revealed increased expression of photosynthetic proteins in transgenic tobacco by overexpression of *AtCBF1* gene

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Supplementary Table 1. Spot abundance of the up- and down-regulated proteins in *AtCBF1* transgenic tobacco.

Up-regulated				Down-regulated			
No	Mr	pI	logFC	No	Mr	pI	logFC
2	11.7	4.94	4.692226	1	12.35	4.86	-10
5	30.62	4.97	2.047681	3	21.65	-1	-10
9	34.95	5.01	2.596877	4	22.04	4.94	-10
13	47.27	5.02	1.940092	7	35.28	4.91	-10
24	13.09	5.12	4.891341	8	40.19	4.95	-10
25	11.88	5.15	5.121702	11	42.7	4.94	-10
27	11.28	5.22	4.316882	12	45.29	-1	-10
31	26.64	5.11	2.140352	14	53.64	4.86	-10
33	32.59	5.11	2.108954	15	55.78	4.91	-10
35	33.01	5.15	1.259516	16	54.06	4.96	-4.088842578
41	34.39	5.14	1.802977	17	61.85	4.96	-3.041180415
50	45.33	5.15	2.535702	18	60.28	4.97	-10
53	45.4	5.24	2.098007	20	57.73	5.04	-10
61	21.93	5.33	1.005878	21	54.4	5.08	-3.617723724
63	16.01	5.39	10	22	69.82	4.91	-1.779484493
65	25.52	5.34	1.205959	23	13.15	5.1	-10
66	25.25	5.38	1.091228	29	18.33	5.18	-2.136123411
68	25.71	5.4	1.416211	42	35.69	5.29	-2.956911934
73	27.9	5.4	1.270858	49	44.95	5.1	-10
79	45.13	5.34	1.387607	51	44.57	5.22	-10
98	20.91	5.42	1.218927	52	45.19	5.23	-10
100	15.45	5.42	10	55	54	5.14	-2.205462121
101	25.65	5.43	1.625864	62	18.14	5.35	-7.55319292
102	26.62	5.59	1.010447	64	24.82	5.3	-10
103	23.62	5.41	10	67	26.62	5.39	-10
114	45.11	5.42	1.229657	69	30.22	5.35	-3.100870884
116	46.91	5.5	1.81848	82	57.98	5.34	-2.065249079
117	45.82	5.42	1.823954	85	60.59	5.4	-2.298943497
126	10.85	5.74	2.069991	86	54.32	5.39	-10
127	11.1	5.93	5.859002	88	60.27	5.35	-2.076152111

128	10.8	5.98	1.023958	89	60.38	5.39	-2.016986582
129	12.95	6.04	1.615495	93	77.18	5.4	-10
131	27.5	5.63	2.193973	96	11.3	5.43	-10
132	26.87	5.86	1.093943	106	31.14	5.42	-10
136	32.88	6.03	1.018334	118	48.47	5.43	-10
141	49.56	5.87	1.91875	121	59.98	5.42	-2.51063739
150	57.14	6.06	10	125	64.99	5.41	-2.298825171
151	13.97	6.38	3.134048	135	31.41	5.89	-10
153	10.8	6.65	1.372546	138	38.86	5.82	-10
155	23.94	6.47	2.287059	139	39.99	5.82	-2.550970731
163	43.15	6.55	1.49627	144	54.18	5.8	-10
164	41.52	6.5	10	148	56.22	6.07	-10
167	45.38	6.25	2.318112	166	46.29	6.25	-10
171	56.29	6.26	1.694132	170	49.49	6.2	-10
176	54.42	6.57	1.035714	172	56.65	6.26	-10
178	15.96	7.19	1.314855	177	71.06	6.16	-10
181	26.01	7.15	1.319958	179	23.43	6.75	-10
182	26.31	7.11	1.000915	184	30.75	6.74	-10
186	42.76	6.96	2.90017	191	45.15	7.2	-10
189	40.8	7.05	1.044405	194	55.26	7.05	-10
190	42.96	7.33	10	195	60.38	7.13	-10
205	26.52	7.36	3.368037	196	54.19	7.13	-10
214	40.73	7.38	1.286003	197	54.24	7.17	-10
216	42.25	7.55	1.730283	198	77.84	7.19	-10
235	25.3	7.65	1.33261	199	66.14	7.22	-10
239	23.95	8.05	1.842037	200	77.86	7.23	-10
243	39.81	7.65	1.65121	201	10.96	7.45	-5.333190854
244	40.03	7.9	1.125638	202	12.07	7.64	-10
275	15.96	5.13	2.083773	203	19.84	7.46	-4.662074918
277	15.63	5.39	10	204	22.79	7.62	-2.446777228
296	22.2	5.28	10	207	29.64	7.27	-10
291	21.12	5.29	10	208	31.09	7.29	-10
292	21.12	5.29	10	210	30.63	7.48	-10
293	20.91	5.42	1.218927	219	44.38	7.45	-10
294	32.59	5.11	2.108954	221	44.56	7.63	-10
296	21.93	5.33	1.005878	222	53.74	7.47	-2.380475578
297	45.33	5.15	2.535702	223	53.73	7.53	-3.480862975
				224	53.5	7.63	-3.565746975
				225	54.17	7.25	-2.216279672
				226	53.86	7.37	-3.597320024
				230	77.61	7.3	-2.092486476
				231	77.62	7.37	-10
				233	20.77	7.76	-2.311610716
				242	30.3	8.08	-10

245	40	7.94	-10
246	38.83	8.07	-10
250	43.5	7.77	-10
251	43.53	7.88	-10
254	46.31	7.78	-10
255	45.07	7.81	-10
258	53	7.8	-2.65354868
259	52.59	7.85	-10
260	52.4	7.89	-10
261	51.36	7.95	-2.002864954
264	50.29	8.15	-2.543580813
269	63.64	8.02	-10
270	77.51	7.72	-10
271	17.91	8.31	-10
272	42.97	8.17	-10
273	42.28	8.35	-10
279	57.84	5.4	-10
287	41	8.5	-10
288	50	8.4	-10
289	49.71	-1	-10
290	19.18	7.24	-10
298	19.18	7.24	-10

Notes: logFC: logarithm of folds change.

The logFC value of 10 or -10 denotes the protein spot was not detected in WT and CBF1 gels respectively.

Supplementary Table 2. Putative identities of proteins down-regulated in CBF1 transgenic tobacco.

Spot	GI	Protein name	Source
258	40457328	Glutamine synthetase GS58	Tobacco
210	115473	Carbonate dehydratase	Tobacco
261	79321034	Alanine transaminase	<i>Arabidopsis</i>
298	77745458	Triose phosphate isomerase cytosolic isoform-like	Potato
288	92876895	Glycine hydroxymethyltransferase	<i>Medicago truncatula</i>
289	437995	Glycine hydroxymethyltransferase	<i>Flaveria pringlei</i>
287	2792230	NBS-LRR type resistance protein	Rice
22	1143427	Heat shock protein 70	Cucumber
279	76559641	ATPase beta subunit	Tobacco
290	48209968	ATP synthase D chain	Potato

Note: GI, NCBI GI number of matched proteins.