

**Supplemental Table S3.** Up-regulated gene by the knockdown of *CRCT* analyzed by microarray.

Top 50 of up-regulated genes showing average signal intensity of Cyanine-3 and Cyanine-5 above 10 and  $P < 0.05$  are listed. Ratio of change and signal average are expressed as means of four replicates.

Rank	Description	RAP-DB	Ratio of change	Signal av.	P-value
1	Hypothetical protein.	Os07g0511400	689.86	6798.62	0.000
2	Conserved hypothetical protein.	Os03g0115800	211.87	4345.92	0.000
3	Conserved hypothetical protein.	Os10g0371600	166.94	3121.52	0.000
4	Hypothetical protein.	Os06g0265100	114.76	231.30	0.000
5	Conserved hypothetical protein.	Os01g0692400	112.31	187.29	0.000
6	Glycine-rich protein precursor.	Os07g0511100	75.47	553.50	0.001
7	Conserved hypothetical protein.	Os02g0772100	50.11	118.70	0.001
8	Conserved hypothetical protein.	Os07g0122000	41.09	351.54	0.000
9	Conserved hypothetical protein.	Os05g0296200	40.56	59.77	0.000
10	Zn-finger, Dof type domain containing protein.	Os02g0252400	19.30	41.30	0.003
11	Conserved hypothetical protein.	Os04g0677000	12.72	30.95	0.000
12	Nonaspanin (TM9SF) family protein.	Os08g0288400	10.67	17.54	0.048
13	Conserved hypothetical protein.	Os03g0383100	10.26	15.39	0.000
14	Non-protein coding transcript, unclassifiable transcript.	Os04g0397800	10.17	16.33	0.001
15	Hypothetical protein.	Os06g0261300	9.93	89.51	0.000
16	Hypothetical protein.	Os11g0514800	9.48	22.49	0.017
17	Conserved hypothetical protein.	Os05g0124700	9.27	18.25	0.000
18	(No Hit)	Os08g0316400	8.52	2032.25	0.001
19	Conserved hypothetical protein.	Os07g0442800	8.40	29.44	0.003
20	(No Hit)	Os03g0446000	8.30	2066.08	0.002
21	(No Hit)	Os07g0229600	8.11	2060.17	0.002
22	Conserved hypothetical protein.	Os06g0273400	8.00	22.29	0.003
23	(No Hit)	Os04g0575900	7.99	2079.15	0.002
24	Conserved hypothetical protein.	Os04g0115200	7.62	30.34	0.002
25	Conserved hypothetical protein.	Os07g0573000	7.61	18.92	0.019
26	(No Hit)	Os02g0209900	7.59	11.79	0.002
27	Conserved hypothetical protein.	Os01g0210300	7.58	20.70	0.013
28	Peroxidase 1.	Os07g0639400	7.58	12.32	0.002
29	(No Hit)	Os01g0225700	7.47	18.72	0.001

30	miRNA	osa-miR169n	7.34	13.15	0.000
31	Alpha-amylase/subtilisin inhibitor (RASI).	Os04g0526600	7.28	19.85	0.002
32	Legume lectin, beta domain containing protein.	Os04g0141400	7.13	12.07	0.019
33	Conserved hypothetical protein.	Os11g0579100	6.97	16.75	0.035
34	PR1a protein.	Os07g0124900	6.77	750.77	0.003
35	Xyloglucan 6-xylosyltransferase (AtXT1).	Os12g0149300	6.58	13.64	0.001
36	Hypothetical protein.	Os05g0330100	6.39	14.32	0.000
37	Oleosin Zm-I (Oleosin 16 kDa) (Lipid body-associated protein L3).	Os04g0546500	6.39	13.85	0.004
38	Protein of unknown function DUF1264 family protein.	Os05g0569500	6.31	25.10	0.020
39	miRNA	osa-miR169f	6.29	22.41	0.035
40	GRF zinc finger domain containing protein.	Os03g0164200	6.27	10.50	0.002
41	Hypothetical protein.	Os05g0580100	6.23	12.13	0.034
42	Hypothetical protein.	Os04g0168300	6.12	10.64	0.000
43	Chalcone synthase J (Naringenin-chalcone synthase J).	Os05g0212900	6.04	15.05	0.040
44	Nitrilase/cyanide hydratase and apolipoprotein N-acyltransferase domain containing protein.	Os06g0205800	5.89	12.98	0.003
45	(No Hit)	Os11g0491900	5.85	13.04	0.022
46	(No Hit)	Os04g0607800	5.67	12.49	0.021
47	Conserved hypothetical protein.	Os06g0200800	5.66	21.26	0.003
48	miRNA	osa-miR395e	5.54	11.92	0.003
49	Glycoside hydrolase, family 1 protein.	Os09g0511900	5.52	28.85	0.045
50	Allyl alcohol dehydrogenase.	Os12g0227400	5.52	10.45	0.048