

Supplemental Table 4. Predicted targets of miRNA*s detected in the rubber tree small RNA libraries.

miRNA* ID	Target Acc.#	Database&	Expectation*	Target Description
miR156*	EC601929.1	rubber tree	3	W147 YLX600 Hevea brasiliensis cDNA clone W147 5'
	TC6504	Cassava	3	homologue to UniRef100_A9V3I4 Cluster: Predicted protein
miR157*	TC3142	Leafy spurge	2.5	similar to UniRef100_A7Q511 Cluster: Chromosome undetermined scaffold_51
	DV123826	Leafy spurge	3	homologue to UniRef100_Q480W3 Cluster: Zinc carboxypeptidase family protein
	TC3486	Cassava	3	homologue to UniRef100_Q8W0W5 Cluster: Repressor protein
miR159*	TC3446	Leafy spurge	2	similar to UniRef100_A7PZA4 Cluster: Chromosome chr15 scaffold_40
	TC8317	Leafy spurge	3	similar to UniRef100_A7QN97 Cluster: Chromosome chr2 scaffold_132
miR160*	DV138293	Leafy spurge	2.5	similar to UniRef100_A7PXL8 Cluster: Chromosome chr12 scaffold_36
	DB932318	Cassava	2.5	similar to UniRef100_A7QYJ3 Cluster: Chromosome undetermined scaffold_248
	TC3271	Cassava	2.5	similar to UniRef100_A7QYJ3 Cluster: Chromosome undetermined scaffold_248
	DV141695	Leafy spurge	3	similar to UniRef100_Q2UBR6 Cluster: Predicted protein
miR162*	DV153829	Leafy spurge	3	weakly similar to UniRef100_A6PP86 Cluster: Helix-turn-helix-domain containing protein AraC type
	DB920810	Cassava	3	similar to UniRef100_Q9SAF1 Cluster: F3F19.20 protein
	TC2881	Cassava	3	similar to UniRef100_P29685 Cluster: ATP synthase subunit beta mitochondrial precursor
	TC8601	Cassava	3	
miR164*	EC603964.1	rubber tree	3	Y70A02 YLX600 Hevea brasiliensis cDNA clone Y70A02 5'
	EC605827.1	rubber tree	3	Y41C10 YLX600 Hevea brasiliensis cDNA clone Y41C10 5'
	EC606195.1	rubber tree	3	Y46D04 YLX600 Hevea brasiliensis cDNA clone Y46D04 5'
	EC606897.1	rubber tree	3	Y28E02 YLX600 Hevea brasiliensis cDNA clone Y28E02 5'
	EC606898.1	rubber tree	3	Y32G04 YLX600 Hevea brasiliensis cDNA clone Y32G04 5'
	EC608381.1	rubber tree	3	Y41B10 YLX600 Hevea brasiliensis cDNA clone Y41B10 5'
	EC608933.1	rubber tree	3	Y17G04 YLX600 Hevea brasiliensis cDNA clone Y17G04 5'
	DV135150	Leafy spurge	3	similar to UniRef100_A7PPE8 Cluster: Chromosome chr8 scaffold_23
	TC7109	Cassava	3	similar to UniRef100_A7Q2L3 Cluster: Chromosome chr1 scaffold_46
miR165*	DV456330	Cassava	2.5	similar to UniRef100_A7PSY4 Cluster: Chromosome chr8 scaffold_29
	TC10052	Cassava	2.5	similar to UniRef100_A7PZN1 Cluster: Chromosome chr15 scaffold_40
	DV153724	Leafy spurge	3	weakly similar to UniRef100_A7QCU1 Cluster: Chromosome undetermined scaffold_79
	TC1239	Leafy spurge	3	weakly similar to UniRef100_UPI000004821D Cluster: protein kinase family protein
	TC4139	Leafy spurge	3	similar to UniRef100_A8BLZ0 Cluster: Kinase-like protein
	DV449693	Cassava	3	weakly similar to UniRef100_Q8W1F0 Cluster: Kinase R-like protein
	TC3415	Cassava	3	similar to UniRef100_A7QP58 Cluster: Chromosome chr1 scaffold_136
	TC5604	Cassava	3	similar to UniRef100_Q56Y11 Cluster: Dehydrodolichyl diphosphate synthase 2

miR166*	DB925634	Cassava	3	similar to UniRef100_A1KYA8 Cluster: Cytochrome c oxidase subunit 1
	DV456330	Cassava	3	similar to UniRef100_A7PSY4 Cluster: Chromosome chr8 scaffold_29
	TC6887	Cassava	3	similar to UniRef100_A7Q9B0 Cluster: Chromosome chr19 scaffold_66
miR167*	DB936193	Cassava	2.5	homologue to UniRef100_A8QG34 Cluster: 60Kd inner membrane protein
	TC5340	Cassava	2.5	homologue to UniRef100_A7QIK3 Cluster: Chromosome chr9 scaffold_104
	DV127192	Leafy spurge	3	weakly similar to UniRef100_Q2UL89 Cluster: Uncharacterized conserved protein
	DV150253	Leafy spurge	3	similar to UniRef100_A7Q0I0 Cluster: Chromosome chr7 scaffold_42
	DV151673	Leafy spurge	3	homologue to UniRef100_A7NWN0 Cluster: Chromosome chr5 scaffold_2
	TC360	Leafy spurge	3	similar to UniRef100_A7NW39 Cluster: Chromosome chr5 scaffold_2
	TC775	Leafy spurge	3	weakly similar to UniRef100_A7Q951 Cluster: Chromosome chr19 scaffold_66
	TC8078	Leafy spurge	3	similar to UniRef100_A7PWA4 Cluster: Chromosome chr8 scaffold_34
	TC2710	Cassava	3	weakly similar to UniRef100_A7NTN2 Cluster: Chromosome chr18 scaffold_1
	DB933541	Cassava	3	homologue to UniRef100_P34788 Cluster: 40S ribosomal protein S18
	FG807161	Cassava	3	similar to UniRef100_A7QJ51 Cluster: Chromosome chr2 scaffold_105
	TC3010	Cassava	3	homologue to UniRef100_A0EJL8 Cluster: GDP-D-mannose-3' 5'-epimerase
	TC3048	Cassava	3	similar to UniRef100_A7P6Q1 Cluster: Chromosome chr9 scaffold_7
	TC699	Cassava	3	homologue to UniRef100_P34788 Cluster: 40S ribosomal protein S18
	miR168*	TC5824	Cassava	3
TC5824		Cassava	3	similar to UniRef100_Q9LTS5 Cluster: Nucleosome assembly protein
miR170*/miR171*	TC49	Leafy spurge	3	similar to UniRef100_A7QA87 Cluster: Chromosome undetermined scaffold_70
	DB934102	Cassava	3	weakly similar to UniRef100_A7QJB0 Cluster: Chromosome chr8 scaffold_106
miR172*	CK645041	Cassava	1.5	homologue to UniRef100_A0ZCI3 Cluster: ABC transporter-like protein
	DB951894	Cassava	1.5	weakly similar to UniRef100_A8L5D0 Cluster: Peptidoglycan-binding domain 1 protein precursor
	DV449432	Cassava	1.5	weakly similar to UniRef100_A9HMI2 Cluster: Transcriptional regulator Crp/Fnr family
	DV157186	Leafy spurge	2.5	similar to UniRef100_A7Q281 Cluster: Chromosome chr13 scaffold_45
	FG806870	Cassava	2.5	similar to UniRef100_A7P521 Cluster: Chromosome chr4 scaffold_6
	EC603229.1	rubber tree	3	Y23F09 YLX600 Hevea brasiliensis cDNA clone Y23F09 5'
	EC603229.1	rubber tree	3	Y23F09 YLX600 Hevea brasiliensis cDNA clone Y23F09 5'
	DV137558	Leafy spurge	3	similar to UniRef100_A7P2I5 Cluster: Chromosome chr1 scaffold_5
	TC9895	Leafy spurge	3	homologue to UniRef100_A7P9B0 Cluster: Chromosome chr3 scaffold_8
	DV133148	Leafy spurge	3	
	DV133148	Leafy spurge	3	
	DV448611	Cassava	3	similar to UniRef100_A0MNJ9 Cluster: CBL-interacting protein kinase 12

	TC6168	Cassava	3	homologue to UniRef100_A7QHZ1 Cluster: Chromosome chr17 scaffold_101
	TC6670	Cassava	3	similar to UniRef100_A7QE81 Cluster: Chromosome chr4 scaffold_83
	TC7355	Cassava	3	similar to UniRef100_A0MKN0 Cluster: CBL-interacting protein kinase 13
	CK645041	Cassava	3	homologue to UniRef100_A0ZCI3 Cluster: ABC transporter-like protein
	CK651932	Cassava	3	
	DB951894	Cassava	3	weakly similar to UniRef100_A8L5D0 Cluster: Peptidoglycan-binding domain 1 protein precursor
	DV449432	Cassava	3	weakly similar to UniRef100_A9HMI2 Cluster: Transcriptional regulator Crp/Fnr family
	CK645041	Cassava	3	homologue to UniRef100_A0ZCI3 Cluster: ABC transporter-like protein
	CK651932	Cassava	3	
	DB951894	Cassava	3	weakly similar to UniRef100_A8L5D0 Cluster: Peptidoglycan-binding domain 1 protein precursor
	DV449432	Cassava	3	weakly similar to UniRef100_A9HMI2 Cluster: Transcriptional regulator Crp/Fnr family
miR390*	TC4022	Cassava	3	similar to UniRef100_A7P779 Cluster: Chromosome chr9 scaffold_7
	TC3526	Cassava	3	homologue to UniRef100_Q6V3B0 Cluster: Adenosine 5' phosphosulfate reductase
miR393*	EC605492.1	rubber tree	3	A232 YLX600 Hevea brasiliensis cDNA clone A232 5'
	TC4642	Leafy spurge	3	similar to UniRef100_A7PI01 Cluster: Chromosome chr13 scaffold_17
	TC9253	Leafy spurge	3	similar to UniRef100_A7Q587 Cluster: Chromosome undetermined scaffold_52
	DV441769	Cassava	3	similar to UniRef100_A7XEE1 Cluster: 3-dehydroquinate dehydratase/shikimate 5-dehydrogenase
	DV450102	Cassava	3	similar to UniRef100_A7PH39 Cluster: Chromosome chr17 scaffold_16
	TC5616	Cassava	3	similar to UniRef100_A7P5K3 Cluster: Chromosome chr4 scaffold_6
	TC9357	Cassava	3	similar to UniRef100_A7PH39 Cluster: Chromosome chr17 scaffold_16
	TC9796	Cassava	3	similar to UniRef100_A7PH39 Cluster: Chromosome chr17 scaffold_16
miR395*	DV154896	Leafy spurge	2.5	similar to UniRef100_Q94IJ3 Cluster: Somatic embryogenesis receptor-like kinase 3
	DV150145	Leafy spurge	3	similar to UniRef100_A7PDP8 Cluster: Chromosome chr11 scaffold_13
	DB933203	Cassava	3	UniRef100_Q14738-2 Cluster: Isoform Delta
miR396*	GR305850.1	rubber tree	2.5	TPD_SSH_BAI189 Transcripts of bark tissues of healthy trees Hevea brasiliensis cDNA similar to UNKNOWN PROTEIN
	DB942674	Cassava	2.5	similar to UniRef100_A5I8L8 Cluster: ACC oxidase 2
	DV146409	Leafy spurge	3	similar to UniRef100_Q19N58 Cluster: Na ⁺ /H ⁺ antiporter
	DV149646	Leafy spurge	3	weakly similar to UniRef100_A7QFW2 Cluster: Chromosome undetermined scaffold_89
	DV152598	Leafy spurge	3	weakly similar to UniRef100_A2Q513 Cluster: Pentatricopeptide repeat
	TC1422	Leafy spurge	3	similar to UniRef100_A7Q173 Cluster: Chromosome chr10 scaffold_43

	TC7054	Leafy spurge	3	similar to UniRef100_A7PWD5 Cluster: Chromosome chr8 scaffold_34
	DV152598	Leafy spurge	3	weakly similar to UniRef100_A2Q513 Cluster: Pentatricopeptide repeat
	TC10498	Leafy spurge	3	similar to UniRef100_A7PL65 Cluster: Chromosome chr7 scaffold_20
	DB952678	Cassava	3	weakly similar to UniRef100_A7PL76 Cluster: Chromosome chr7 scaffold_20
	TC2458	Cassava	3	homologue to UniRef100_P34788 Cluster: 40S ribosomal protein S18
	TC8807	Cassava	3	
	DB922509	Cassava	3	similar to UniRef100_A7NX81 Cluster: Chromosome chr5 scaffold_2
	TC12018	Cassava	3	similar to UniRef100_A6WVL2 Cluster: Phosphomethylpyrimidine kinase precursor
	DB931529	Cassava	3	similar to UniRef100_A7P0K7 Cluster: Chromosome chr19 scaffold_4
	DB943779	Cassava	3	weakly similar to UniRef100_A7QAX1 Cluster: Chromosome chr5 scaffold_72
	DR086084	Cassava	3	similar to UniRef100_A5YAI9 Cluster: CBL-interacting protein kinase
	FF380927	Cassava	3	similar to UniRef100_A7QNG3 Cluster: Chromosome chr2 scaffold_132
	TC2291	Cassava	3	similar to UniRef100_A0MNL4 Cluster: CBL-interacting protein kinase 6
	DB931529	Cassava	3	similar to UniRef100_A7P0K7 Cluster: Chromosome chr19 scaffold_4
miR398*	TC11498	Cassava	3	similar to UniRef100_Q9LVA0 Cluster: Dbj BAA90612.1
miR447*	TC9834	Leafy spurge	1.5	similar to UniRef100_A7NZK6 Cluster: Chromosome chr6 scaffold_3
	EC602884.1	rubber tree	2.5	W903 YLX600 Hevea brasiliensis cDNA clone W903 5'
	EC607217.1	rubber tree	2.5	Y18B12 YLX600 Hevea brasiliensis cDNA clone Y18B12 5'
	DV134116	Leafy spurge	2.5	similar to UniRef100_A7Q4J0 Cluster: Chromosome chr9 scaffold_49
	TC2432	Leafy spurge	2.5	similar to UniRef100_Q9LM04 Cluster: Cyclic nucleotide-gated calmodulin-binding ion channel
	CK644694	Cassava	2.5	similar to UniRef100_Q8H6U1 Cluster: Cyclic nucleotide-gated channel C
	DB933654	Cassava	2.5	similar to UniRef100_Q3EAH8 Cluster: Uncharacterized protein At3g59040.2
	DV126855	Leafy spurge	3	similar to UniRef100_A7NZA7 Cluster: Chromosome chr6 scaffold_3
	DV141825	Leafy spurge	3	weakly similar to UniRef100_A7QH05 Cluster: Chromosome chr3 scaffold_95
	DV142104	Leafy spurge	3	similar to UniRef100_A5BKY3 Cluster: Lipoxigenase
	DV152012	Leafy spurge	3	similar to UniRef100_A7QWJ1 Cluster: Chromosome chr10 scaffold_204
	TC2597	Leafy spurge	3	weakly similar to UniRef100_A7PRR6 Cluster: Chromosome chr14 scaffold_27
	TC2912	Leafy spurge	3	similar to UniRef100_A7PLZ4 Cluster: Chromosome chr14 scaffold_21
	TC6707	Leafy spurge	3	similar to UniRef100_A5B0X9 Cluster: Delta-aminolevulinic acid dehydratase
	TC912	Leafy spurge	3	similar to UniRef100_A7NZA7 Cluster: Chromosome chr6 scaffold_3
	DB944783	Cassava	3	similar to UniRef100_A7PAR9 Cluster: Chromosome chr14 scaffold_9
	TC486	Cassava	3	similar to UniRef100_Q9M385 Cluster: 50S ribosomal protein L17 chloroplast precursor
miR482*	DV144269	Leafy spurge	3	similar to UniRef100_Q6K7S7 Cluster: Cytochrome c biogenesis protein-like
	TC10327	Leafy spurge	3	

	TC2856	Leafy spurge	3	
	TC7081	Leafy spurge	3	
	DV144269	Leafy spurge	3	similar to UniRef100_Q6K7S7 Cluster: Cytochrome c biogenesis protein-like
	TC10327	Leafy spurge	3	
	TC2856	Leafy spurge	3	
	TC7081	Leafy spurge	3	
	CK650170	Cassava	3	similar to UniRef100_UPI0000162EFA Cluster: leucine-rich repeat family protein
	CK650170	Cassava	3	similar to UniRef100_UPI0000162EFA Cluster: leucine-rich repeat family protein
miR1510*	FF534613	Cassava	3	homologue to UniRef100_Q40528 Cluster: Nt-rab7c protein
	TC5752	Cassava	3	similar to UniRef100_A7P339 Cluster: Methionine aminopeptidase
miR3623*	EC607218.1	rubber tree	1.5	A952 YLX600 Hevea brasiliensis cDNA clone A952 5'
	TC5268	Leafy spurge	2	similar to UniRef100_A7PA49 Cluster: Chromosome chr14 scaffold_9
	DV156491	Leafy spurge	2.5	homologue to UniRef100_A5BCC0 Cluster: Histone H2B
	TC6059	Leafy spurge	2.5	similar to UniRef100_A7P841 Cluster: Chromosome chr3 scaffold_8
	DV126152	Leafy spurge	3	UniRef100_Q7MZY7 Cluster: Glycerophosphoryl diester phosphodiesterase periplasmic
	DB948724	Cassava	3	
	TC8431	Cassava	3	homologue to UniRef100_Q41141 Cluster: Pyrophosphate--fructose 6-phosphate 1-phosphotransferase subunit beta
miR3630*	TC2080	Leafy spurge	3	similar to UniRef100_A7Q8K6 Cluster: Chromosome chr5 scaffold_64
	TC4123	Leafy spurge	3	weakly similar to UniRef100_A7QLR0 Cluster: Chromosome chr18 scaffold_121
	TC6758	Leafy spurge	3	similar to UniRef100_A7PLH1 Cluster: Chromosome chr7 scaffold_20
	DB926422	Cassava	3	similar to UniRef100_A7Q1J8 Cluster: Chromosome chr7 scaffold_44
	DB940413	Cassava	3	similar to UniRef100_A7QQS7 Cluster: Chromosome undetermined scaffold_144
	DB948752	Cassava	3	similar to UniRef100_Q8L891 Cluster: AT4g35790/F4B14_60
	TC11937	Cassava	3	similar to UniRef100_A7PJE1 Cluster: Chromosome chr12 scaffold_18
miR3633*	CK644695	Cassava	3	homologue to UniRef100_A6MUT4 Cluster: GDP-mannose pyrophosphorylase
	TC6655	Cassava	3	similar to UniRef100_Q8L7U4 Cluster: AT4g02450/T14P8_5
	TC8438	Cassava	3	

Target Acc.: target accession numbers. For the target genes predicted from rubber tree ESTs, the accession numbers are from Genbank. The accession numbers for the other targets are from Euphorbia esula (leafy spurge) DFCI gene index release 1 or Manihot esculenta (cassava) DFCI gene index release 1.

& Database: the database from which the targets were predicted.

* Expectation: the scores given by the target prediction program. In the 0-5 scale, a score of 0-2 represents a stringent cutoff.