

Supplemental Table S1 The primer sets used in this study

Name	Sequence(5'-3')
Yeast one-hybrid screening	
pbHLH2-1F	AAATGATGAATTGAAA <u>AGCTT</u> GCATAACTTATAATCTTAAGTATGATGATCATAT
pbHLH2-1R	GTCGACAGATCCCCG <u>GGTACC</u> CTACCTAAGAATTTCTAGTAGAGGTAAATTGTA
pbHLH2-2F	AAATGATGAATTGAAA <u>AGCTT</u> TATGTGGTTCTGAACGTTTAGAATTAAT
pbHLH2-2R	GTCGACAGATCCCCG <u>GGTACC</u> GGGAAAGATGTGAGACAGAGTGG
pAbAi-F	CAAGTTTGTTCGCTTTTCGTGC
pAbAi-R	GCTGGAATGATGAATAAAGTGCC
Yeast one-hybrid assay	
ERF1-ADF	GCCATGGAGGCCAGTGA <u>ATTC</u> ATGAATTCAGGATTCTCCTCCGA
ERF1-ADR	CAGCTCGAGCTCGATGGATCCTTAAACCAAGGGATTAGGAGTAATTG
ERF10-ADF	GCCATGGAGGCCAGTGA <u>ATTC</u> ATGGCTCCCAAGGAGAAGGG
ERF10-ADR	CAGCTCGAGCTCGATGGATCCTTAGAGAGCGCCGGTTCCG
pGADT7-F	CGATGATGAAGATACCCACCAAACC
pGADT7-R	ACTTGCGGGGTTTTTCAGTATCTACG
Yeast two-hybrid (Y2H) assay	
ERF1-BDF	ATGGCCATGGAGGCCGA <u>ATTC</u> ATGAATTCAGGATTCTCCTCCGA
ERF1-BDR	CCGCTGCAGGTCGACGGATCCTTAAACCAAGGGATTAGGAGTAATTG
ERF10-BDF	ATGGCCATGGAGGCCGA <u>ATTC</u> ATGGCTCCCAAGGAGAAGGG
ERF10-BDR	CCGCTGCAGGTCGACGGATCCTTAGAGAGCGCCGGTTCCG
pGBKT7-F	TAATACGACTCACTATAGGGCGA
pGBKT7-R	GACTCTTAGGTTTTAAACGAAAA
Dual-luciferase assay	
pb2-1-0800F	CTATAGGGCGAATTGGGTACC <u>CGCCG</u> CTTTATTGGTGA
pb2-1-0800R	TGTTTTTGGCGTCTTCCATGGCTACCTAAGAATTTCTAGTAGAGGTAAATTGTA
p0800-LUC-F	CAAGGCGATTAAAGTTGGGTAAC
p0800-LUC-R	CTCTCCAGCGGTTCCATCTTCC
ERF1-62-SKF	AGGACAGCCCAAGCTGAGCTCATGAATTCAGGATTCTCCTCCGA
ERF1-62-SKR	GGTACCGGGCCCCCTCGAGTTAAACCAAGGGATTAGGAGTAATTG

ERF10-62-SKF	AGGACAGCCCAAGCT <u>GAGCTCAT</u> GGCTCCCAAGGAGAAGGG
ERF10-62-SKR	GGTACCGGGCCCCCCTCGAGTTAGAGAGCGCCGGTTCCG
p62-SK-F	CATATAAGGAAGTCATTTTCATT
p62-SK-R	TCCCTTATCGGGAAACTACTCA

Subcellular localization analysis

ERF1-1300F	TTTTCTGATTAACAGGGATCCATGAATTCAGGATTCTCCTCCGA
ERF1-1300R	GCTCTCGAGACTAGTGGTACCAACCAAGGGATTAGGAGTAATTGATG
ERF10-1300F	TTTTCTGATTAACAGGGATCCATGGCTCCCAAGGAGAAGGG
ERF10-1300R	GCTCTCGAGACTAGTGGTACCGAGAGCGCCGGTTCCGAG
pCambia1300-F	TACTCTTCGATTTGTGATTTC
pCambia1300-R	CATCGCAAGACCGGCAACAGG

Real-time quantitative PCR

Q-G14-F	GTGCGGAAACTGCGACTGC
Q-G14-R	CGTCCATCTTGCTTCCCTTCCT
Q-MYB1-F	ATGGTTATTTTCATCTGTATGGTCGG
Q-MYB1-R	CTCAAAAGTTGGTCTTCTTCTTCG
Q-bHLH2-F	TGAACTGGGAACAACGGAAAGGG
Q-bHLH2-R	ATGATGATGGTGGTGGGGATGGGG
Q-WD40-1F	GAGAAAGGCGTGGTGGAAACCCA
Q-WD40-1R	AACCGACCCGTCAGCCGACACTGAA
Q-ERF1-F	AACGGGATAAGGGTTTGGCTGGG
Q-ERF1-R	CGGACAGTCTCCACGGGGAAGTT
Q-ERF10-F	GAGGGAGTTTCGGGGTTCCAAGG
Q-ERF10-R	GGCGTTCTTCTCACACACGCTATTCT
Q-CHS-F	AAAACCTGAAAACTCCGAGCCACG
Q-CHS-R	CAAACCCAAACAGCACACCCAC
Q-CHI-F	GAAGGTGTCGGAAAACTGCGTTG
Q-CHI-R	GGGGTGATTGAGTGAAGAAAATAGAGG
Q-F3H-F	TTCATCGTTTCCAGCCATCTCCA

Q-F3H-R	TTTTCCGTTACTGCCCTCCACCC
Q-F3'H-F	CTGTGGAGTGGGCATTCGCAGAA
Q-F3'H-R	AGAGAGTGGGGTGGATGGGTGTAGC
Q-ANS-F	AATAATGCTAGTGGGCAGCTTGAGTG
Q-ANS-R	AAGGAGTTTTAGGCCAAATGGAGAGA
Q-DFR-F	CTGCTGGCTTTATCGGCTCCTGGT
Q-DFR-R	TGTCAAATTCGTGTCCGCTTTCG
Q-UF3GT-F	GCGTTCCTTGGATTTCTTTTGG
Q-UF3GT-R	TGACATTCCTGGGATTACTTTCAGCT

Supplemental Table S2 Information of genes interacted with *pIbHLLH2-1* by yeast one hybrid screening

NO	Gene	Accession	Length(bp)	NO	Gene	Accession	Length(bp)
1	<i>UR5GT</i>	AT4G09810.1	2176	112	<i>hsp70</i>	AT3G09440.1	3593
2	<i>LLG3</i>	AT2G22821.1	829	113	<i>L30</i>	AT2G44120.2	1738
3	<i>PCS</i>	AT3G54020.1	2639	114	<i>SAP</i>	AT5G39090.1	1680
4	<i>MI7</i>	AT2G41260.2	1247	115	<i>SAP2</i>	AT5G66840.1	2683
5	<i>MBOAT</i>	AT1G57600.1	4711	116	<i>RBP47B</i>	AT1G28330.5	1655
6	<i>RVE6</i>	AT5G52660.2	3273	117	<i>PP2C</i>	AT1G47380.1	3721
7	<i>PGP10</i>	AT1G49320.1	1784	118	<i>GR</i>	AT5G46730.1	1246
8	<i>CHC1</i>	AT3G11130.1	9917	119	<i>NGA4</i>	AT4G01500.1	1730
9	<i>NAC</i>	AT4G35520.1	6040	120	<i>RRT4</i>	AT1G14020.1	2656
10	<i>ARM</i>	AT4G16490.1	2547	121	<i>EBF2</i>	AT5G47040.1	5915
11	<i>RXF26</i>	AT1G06980.1	1039	122	<i>LTP12</i>	AT3G51590.1	1057
12	<i>SNF7</i>	AT2G19830.1	1352	123	<i>SRC2</i>	AT1G09070.1	1606
13	<i>DPA</i>	AT5G02470.1	2618	124	<i>ADF6</i>	AT2G31200.1	1458
14	<i>AH</i>	AT3G23600.1	2398	125	<i>ZincRP</i>	AT3G16080.1	1181
15	<i>MPK17</i>	AT4G25900.1	2400	126	<i>ACA9</i>	AT3G21180.1	6890
16	<i>AGD12</i>	AT4G21160.1	2692	127	<i>GH9C2</i>	AT1G64390.1	4213
17	<i>MC4</i>	AT1G79340.1	2052	128	<i>LTI6B</i>	AT3G05890.1	1368
18	<i>DJA5</i>	AT4G39960.1	2885	129	<i>HINT4</i>	AT4G16566.1	2349
19	<i>MYB3R4</i>	AT5G11510.1	5137	130	<i>RCE1</i>	AT4G36800.1	2104
20	<i>G6PD6</i>	AT4G09520.1	2320	131	<i>PS</i>	AT4G39280.1	3514
21	<i>SLK2</i>	AT5G62090.1	4207	132	<i>RING</i>	AT1G13195.1	2096
22	<i>TIN1</i>	AT5G64510.1	1982	133	<i>RF</i>	AT3G10915.5	1814
23	<i>GF</i>	AT5G57500.1	1543	134	<i>HDG2</i>	AT1G04353.1	1945
24	<i>UBQ2</i>	AT2G36170.1	1280	135	<i>PBL38</i>	AT2G39110.1	2239
25	<i>RER1C1</i>	AT2G23310.1	1937	136	<i>PFK7</i>	AT5G56630.1	3160
26	<i>AAH</i>	AT4G20070.1	3384	137	<i>HER2</i>	AT5G63620.1	2423

27	<i>UNE12</i>	AT4G02590.1	3054	138	<i>FQR1</i>	AT4G36750.1
28	<i>PDC3</i>	AT5G01330.1	2657	139	<i>AMT2</i>	AT2G38290.1
29	<i>rRNA</i>	AT3G41768.1	1808	140	<i>BBE23</i>	AT1G51810.1
30	<i>MEM1</i>	AT1G48950.1	3527	141	<i>NH</i>	AT5G12040.1
31	<i>DCD</i>	AT3G27090.1	2316	142	<i>AUXIL</i>	AT1G30280.1
32	<i>GBF1</i>	AT4G36730.1	2877	143	<i>PSBK</i>	ATCG00070.1
33	<i>L18e/L15</i>	AT1G70600.1	959	144	<i>TSD2</i>	AT1G78240.1
34	<i>A20/AN1</i>	AT1G51200.1	2354	145	<i>ATG3</i>	AT5G61500.1
35	<i>MAC5A</i>	AT1G07360.1	2607	146	<i>ASP3</i>	AT5G11520.1
36	<i>SRN19</i>	AT5G61820.1	2634	147	<i>AUG1</i>	AT2G41350.2
37	<i>tRNA</i>	AT4G16510.1	3237	148	<i>PP2A-3</i>	AT2G42500.1
38	<i>RRM</i>	AT1G22910.3	2576	149	<i>SPPL1</i>	AT4G33410.1
39	<i>SOQ1</i>	AT1G56500.1	7598	150	<i>PES</i>	AT5G14520.1
40	<i>Gh35</i>	AT2G04060.1	3028	151	<i>bHLH093L</i>	AT5G65640.1
41	<i>WSD6</i>	AT3G49210.1	3481	152	<i>AIG1</i>	AT1G68810.1
42	<i>UGT73B3</i>	AT4G34131.1	1762	153	<i>BRXL4</i>	AT5G20540.1
43	<i>RHO</i>	AT5G22400.1	2905	154	<i>ER</i>	AT5G10780.2
44	<i>TCP-1</i>	AT1G24510.1	2976	155	<i>NCBP</i>	AT5G18110.1
45	<i>RRM</i>	AT4G35785.5	2380	156	<i>GATA2</i>	AT2G45050.1
46	<i>CBF5</i>	AT3G57150.1	2261	157	<i>YUC2</i>	AT3G48500.2
47	<i>DIN9</i>	AT1G67070.1	2815	158	<i>SCAMP2</i>	AT1G11180.2
48	<i>Hsp 70</i>	AT3G09440.1	3593	159	<i>APUM24</i>	AT4G00891.1
49	<i>ABF4</i>	AT3G19290.3	3082	160	<i>RPI4P</i>	AT1G04480.1
50	<i>BAG</i>	AT1G62305.1	2802	161	<i>RPS5</i>	AT5G18380.1
51	<i>EMB2769</i>	AT3G13200.1	2074	162	<i>ATG18G</i>	AT1G03380.1
52	<i>RBP47B</i>	AT3G19130.1	2926	163	<i>TP</i>	AT3G01130.1
53	<i>nst1</i>	AT1G80700.1	1559	164	<i>DUF726</i>	AT4G36210.3
54	<i>KHE</i>	AT1G53760.1	2207	165	<i>RXF26</i>	AT1G58430.1
55	<i>RBL2</i>	AT1G63120.1	2336	166	<i>MSD1</i>	AT3G10920.1

56	<i>HP</i>	AT1G22065.1	770	167	<i>EB</i>	AT3G04480.1
57	<i>CSLC4</i>	AT3G28180.1	3555	168	<i>EIF2</i>	AT2G39990.1
58	<i>EMB2016</i>	AT3G05680.2	12086	169	<i>BHLH129</i>	AT2G42280.1
59	<i>FDA10</i>	AT2G16365.1	5158	170	<i>IRP1</i>	AT3G07170.1
60	<i>DR</i>	AT4G24380.1	1342	171	<i>SAP1</i>	AT1G03230.1
61	<i>ACA9</i>	AT3G21180.1	6890	172	<i>LPPGAM MA</i>	AT5G03080.1
62	<i>SINAT3</i>	AT3G61790.1	2137	173	<i>SPPL5</i>	AT1G05820.1
63	<i>PK</i>	AT5G61570.1	2601	174	<i>KIN3</i>	AT2G17220.1
64	<i>ERF10</i>	AT5G44210.1	1145	175	<i>CYCD4</i>	AT5G65420.3
65	<i>CCHC</i>	AT3G42860.1	2086	176	<i>PDS4</i>	AT2G07717.1
66	<i>EXPR</i>	AT4G17030.1	1729	177	<i>AGD6</i>	AT3G53710.1
67	<i>ARC</i>	AT4G09360.1	3095	178	<i>PERK1</i>	AT3G24550.1
68	<i>PPR</i>	AT5G18475.1	1884	179	<i>RPS6</i>	AT4G31700.1
69	<i>RUB1</i>	AT4G36800.1	2104	180	<i>SINAT3</i>	AT3G61790.1
70	<i>RP40</i>	AT1G72370.1	2087	181	<i>CDS</i>	AT2G47010.1
71	<i>DRM1</i>	AT1G28330.5	1655	182	<i>TP-SH3</i>	AT1G09590.1
72	<i>SP</i>	AT1G69980.1	1858	183	<i>WD40</i>	AT5G14050.1
73	<i>MICU</i>	AT4G32060.1	2668	184	<i>DE</i>	AT4G19110.2
74	<i>PCAP1</i>	AT4G20260.4	2757	185	<i>GTF61</i>	AT3G18170.1
75	<i>RING</i>	AT1G13195.1	2096	186	<i>DUF760</i>	AT5G48590.1
76	<i>MAET</i>	AT1G33110.1	3999	187	<i>TIM17-2</i>	AT2G37410.1
77	<i>PA</i>	AT4G30020.1	4821	188	<i>GOR</i>	AT1G30090.1
78	<i>VDAC3</i>	AT5G15090.1	2281	189	<i>SIB1</i>	AT3G56710.1
79	<i>PFK7</i>	AT5G56630.1	3160	190	<i>ARAC</i>	AT2G17800.1
80	<i>CDCP2</i>	AT4G36910.1	2854	191	<i>YLS8</i>	AT5G08290.1
81	<i>QR</i>	AT4G36750.1	2015	192	<i>CRA-31</i>	AT5G42570.1
82	<i>PGP19</i>	AT3G28860.1	7574	193	<i>LRP</i>	AT3G47090.1
83	<i>SS2</i>	AT3G01180.1	3867	194	<i>ACS12</i>	AT5G51680.1
84	<i>AS</i>	AT2G21390.1	4967	195	<i>PDC1</i>	AT4G33070.1

85	<i>MPK8</i>	AT1G18150.2	3447	196	<i>DUF788</i>	AT2G23940.1
86	<i>AUXILIN</i>	AT1G30280.1	2048	197	<i>LPK</i>	AT4G37830.1
87	<i>COS</i>	AT4G37830.1	1311	198	<i>AH</i>	AT2G21390.1
88	<i>TSD2</i>	AT1G78240.1	3846	199	<i>SINAT3</i>	AT3G61790.1
89	<i>GIB</i>	AT3G53930.2	4493	200	<i>UPL4</i>	AT5G02880.1
90	<i>ASP3</i>	AT5G11520.1	2909	201	<i>ACLA-1</i>	AT1G10670.3
91	<i>GLTP1</i>	AT2G33470.1	2445	202	<i>AS2</i>	AT5G20060.2
92	<i>AMM</i>	AT5G64030.1	4608	203	<i>DCL</i>	AT1G45230.1
93	<i>DUF569</i>	AT1G69890.1	1861	204	<i>RBCL</i>	ATCG00490.1
94	<i>BEX1</i>	AT2G47170.1	2245	205	<i>RAB18</i>	RAB18
95	<i>ERF1</i>	AT3G23240.1	988	206	<i>UBC2</i>	AT2G02760.1
96	<i>GLDH</i>	AT3G47570.1	3535	207	<i>LTPG2</i>	AT3G43720.1
97	<i>BRXL4</i>	AT5G20540.1	4250	208	<i>RLP57</i>	AT5G65830.1
98	<i>MYB3R4</i>	AT5G11510.1	5137	209	<i>HP</i>	AT5G49260.1
99	<i>SAMDC</i>	AT3G02470.1	2445	210	<i>AP2S</i>	AT1G47830.1
100	<i>TIN1</i>	AT5G64510.1	1982	211	<i>AIR12</i>	AT3G19970.1
101	<i>PLIM2B</i>	AT1G01780.1	1485	212	<i>NDA2</i>	AT2G29990.1
102	<i>NFD3</i>	AT1G20696.2	2047	213	<i>AMDM</i>	AT5G64030.1
103	<i>DL</i>	AT1G75860.1	1823	214	<i>TLP5</i>	AT1G43640.1
104	<i>COX11</i>	AT1G02410.1	2104	215	<i>CAT2</i>	AT4G35090.1
105	<i>PGD2</i>	AT3G02360.2	2120	216	<i>UBQ4</i>	AT5G20620.1
106	<i>CM2</i>	AT5G10870.1	1972	217	<i>VTC2</i>	VTC2
107	<i>DCD</i>	AT3G27090.1	2316	218	<i>CCR1</i>	AT1G15950.1
108	<i>UGT73B3</i>	AT4G34131.1	1762	219	<i>ELI3</i>	AT4G37990.1
109	<i>TWN2</i>	AT1G14610.1	6381	220	<i>CSC1</i>	AT4G22120.1
110	<i>RRM</i>	AT4G35785.5	2380	221	<i>OPD</i>	AT1G62250.1
111	<i>AMDM2</i>	AT5G64030.1	4608	222	<i>RABG3D</i>	AT1G52280.1