

Table S4 Genes found in *E. cymbalariae* but not in *A. gossypii*.

E. cymbalariae genes with homologs in *S. cerevisiae* that are absent from *A.**gossypii*

1	Ecym_1002	YCL067C HMLALPHA2
2	Ecym_1003	YCL066W HMLALPHA1
3	Ecym_1114	YCL067C MATALPHA1
4	Ecym_1115	YCL066W MATALPHA2
5	Ecym_1027	YIR030C DCG1
6	Ecym_1028	YDR524C-B
7	Ecym_1059	YDR506C
8	Ecym_1093	YMR318C ADH6
9	Ecym_1223	YBR067C TIP1
10	Ecym_1351	YCR019W MAK32
11	Ecym_1394	YDL209C CWC2
12	Ecym_1496	YCR021C HSP30
13	Ecym_2013	YNL327W EGT2
14	Ecym_2169	YPL223C GRE1
15	Ecym_2268	YGL108C
16	Ecym_2317	YDR387C
17	Ecym_2360	YOR264w DSE3
18	Ecym_2537	YPL039W
19	Ecym_2567	YBR161W CSH1
20	Ecym_2668	YBR071W
21	Ecym_2706	YML107C PML39
22	Ecym_2731	YGL159W
23	Ecym_2772	YLR376C PSY3
24	Ecym_3107	YLR286C CTS1
25	Ecym_3263	YLR394W CST9/ZIP3
26	Ecym_3264	YDL124W

27	Ecym_3364	YOL105C WSC3
28	Ecym_3399	YMR090W
29	Ecym_3408	YKL084W HOT13
30	Ecym_3569	YEL040W UTR2
31	Ecym_4001	YER185W PUG1
32	Ecym_4027	YOR084W LPX1
33	Ecym_4036	YKR087C OMA1
34	Ecym_4205	YDR171W HSP42
35	Ecym_4288	YLR097C HRT3
36	Ecym_4297	YDR119W-A
37	Ecym_4437	YPR134W
38	Ecym_4485	YIL001W
39	Ecym_4487	YIL002W-A
40	Ecym_4607	YML113W DAT1
41	Ecym_5140	YBR047W FMP23
42	Ecym_5363	YOR087W YVC1
43	Ecym_5427	YNL115C
44	Ecym_5553	YDR072C IPT1
45	Ecym_5557	YDR061W
46	Ecym_5577	YGR110W CLD1
47	Ecym_6004	YGL251C HFM1/MER3
48	Ecym_6006	YGL249W ZIP2
49	Ecym_6031	YOR390W
50	Ecym_6064	YLR040C
51	Ecym_6268	YLR363C NMD4
52	Ecym_7011	YJR152W DAL5
53	Ecym_7049	YBR188C NTC20
54	Ecym_7097	YHR149C SKG6
55	Ecym_7235	YBL005W PDR3

56	Ecym_7251	YMR073C IRC21
57	Ecym_7252	YMR072W ABF2
58	Ecym_7256	YMR069W NAT4
59	Ecym_7277	YPR010C-A
60	Ecym_7308	YFL003C MSH4
61	Ecym_7342	YGL041W-A
62	Ecym_7419	YOR320C GNT1
63	Ecym_8023	YIL073C SPO22/ZIP4
64	Ecym_8081	YDL154W MSH5
65	Ecym_8390	YDR032C PST2
66	Ecym_8420	YHL038C CBP2

***E. cymbalariae* genes absent from *S. cerevisiae* and *A. gossypii* but share**

homologs in other yeasts¹

67	Ecym_1007	KLLA0C00462g
68	Ecym_1012	KLLA0C00594g
69	Ecym_1082	KLLA0C02233g
70	Ecym_1420	KLTH0H09306g
71	Ecym_2062	KLLA0E15620g
72	Ecym_2283	KLLA0B00495g
73	Ecym_3096	KLLA0A04521g
74	Ecym_3372	KLLA0E14806g
75	Ecym_4528	KLLA0E03377g
76	Ecym_5045	KLLA0F23221g
77	Ecym_5162	KLLA0B04224g
78	Ecym_5211	KLLA0E15356g
79	Ecym_5262	KLLA0C04433g
80	Ecym_5281	KLTH0C08624g
81	Ecym_5338	KLLA0F21164g

82	Ecym_5415	KLLA0F23573g
83	Ecym_6130	KLLA0A02871g
84	Ecym_6199	KLLA0C11539g
85	Ecym_6395	KLLA0D11066p
86	Ecym_6433	KLLA0D08624p
87	Ecym_6440	KLLA0F20856g
88	Ecym_7076	KLLA0E24442g
89	Ecym_7169	KLLA0E05544g
90	Ecym_8149	KLLA0D10395g
91	Ecym_8160	KLLA0E17039g
92	Ecym_8221	KLLA0F22198g
93	Ecym_8354	KLLA0D14399g ScYAP5/YAP7
94	Ecym_1178	KLLA0E23079g
95	Ecym_2506	KLTH0A06908g
96	Ecym_2679	KLTH0A00440g
97	Ecym_5041	KLTH0D01408g
98	Ecym_7253	KLTH0D06886g
99	Ecym_7302	KLTH0A02728g
100	Ecym_4373	Kpol_1063p1
101	Ecym_3623	NFIA_005660
102	Ecym_3158	SCOCAAB17122
103	Ecym_3156	ZYRO0G01870g
104	Ecym_5064	ZYRO0D04224g

Hypothetical *E. cymbalariae* genes without homolog in the databases

105	Ecym_1213
106	Ecym_1460
107	Ecym_2057
108	Ecym_2064

109	Ecym_2234
110	Ecym_2655
111	Ecym_2740
112	Ecym_2756
113	Ecym_2780
114	Ecym_3228
115	Ecym_3234
116	Ecym_3288
117	Ecym_3377
118	Ecym_3379
119	Ecym_3380
120	Ecym_3401
121	Ecym_3441
122	Ecym_3536
123	Ecym_4267
124	Ecym_4268
125	Ecym_4495
126	Ecym_4582
127	Ecym_4583
128	Ecym_4774
129	Ecym_5223
130	Ecym_5230
131	Ecym_5238
132	Ecym_5449
133	Ecym_5602
134	Ecym_6046
135	Ecym_6063
136	Ecym_6119
137	Ecym_6120

138	Ecym_6121
139	Ecym_6172
140	Ecym_6237
141	Ecym_6297
142	Ecym_6371
143	Ecym_6450
144	Ecym_7298
145	Ecym_7394
146	Ecym_7433
147	Ecym_7444
148	Ecym_8269

1) KLLA: *Kluyveromyces lactis*; KLTH: *Lachancea thermotolerans*; Kpol: *Vanderwaltozyma polyspora*; NFIA: *Neosartorya fischeri*;
SCOC: *Schwanniomyces occidentalis*; ZYR: *Zygosaccharomyces rouxii*