

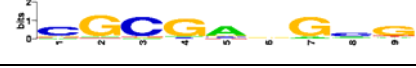

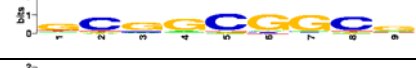
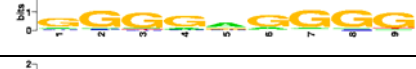
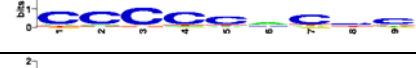
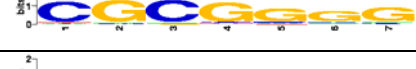
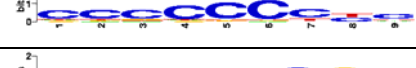





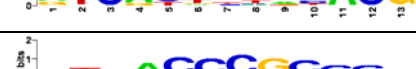

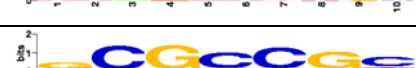
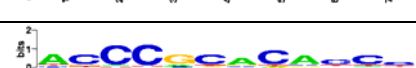

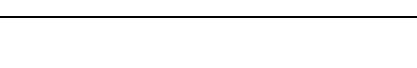




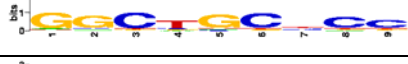


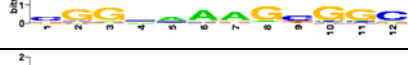

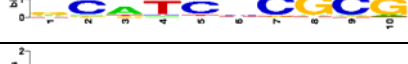








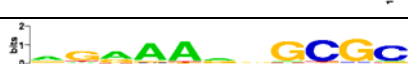
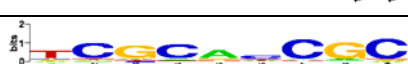

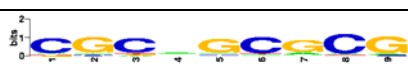
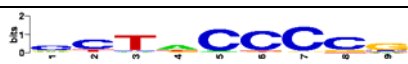
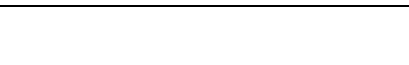


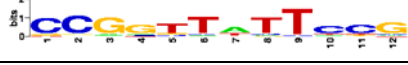

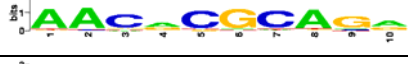


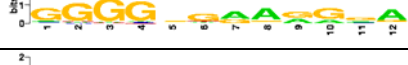














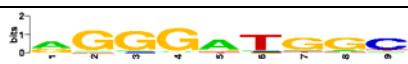
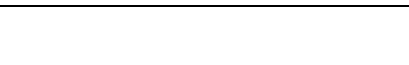


Table 2. PHYLONET motifs

Matrix	Sequence Logo	P value	Tollr	Size of gene cluster
YLR241W.1		0	3281.7	97
YDL216C.1		0	3227.8	346
YPL149W.2		0	3215.54	272
YER153C.2		0	3056.05	787
YML047C.1		0	2975.27	200
YKL124W.1		0	2728.64	326
YPR155C.1		0	2708.61	89
YHR114W.6		0	2669.65	486
YJR121W.2		0	2571.04	168
YHL012W.1		0	2173.55	237
YER013W.2		0	2006.38	284
YBR270C.1		0	1704.12	234
YIR015W.10		0	1394.53	558
YPL165C.1		2.30E-299	3316.64	785
YLR396C.1		1.03E-287	1932.32	365
YDL235C.1		2.54E-266	2239.41	167
YKL133C.1		3.63E-250	2430.42	184
YDL098C.1		5.93E-242	3145.24	405
YIR004W.1		2.97E-230	2052.84	97
YPL038W.1		8.65E-228	2286.87	341


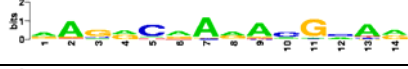

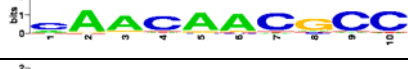
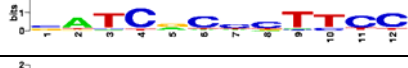


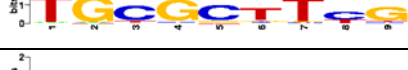




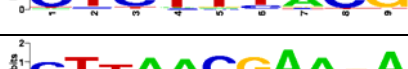









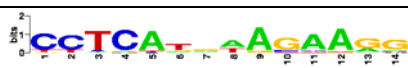
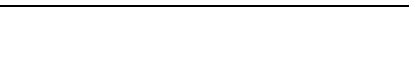
YOR137C.1		1.25E-208	1970.77	199
YGR276C.1		1.23E-190	2104.89	131
YAL040C.4		5.63E-182	1745.97	2093
YPL201C.1		1.13E-181	1338.47	133
YLR244C.1		2.71E-177	1986.46	109
YCR024C-A.10		3.49E-166	1344.65	38
YMR020W.1		1.18E-160	1723.75	151
YPR001W.3		3.71E-159	1961.52	42
YPR169W.1		5.25E-157	2311.45	300
YJR053W.1		2.09E-155	1567.12	102
YJL166W.1		3.46E-155	2048.13	88
YDR476C.1		4.51E-152	1850.84	826
YPL148C.1		5.18E-152	1404.95	232
YNL128W.1		2.30E-146	1535.17	281
YDR294C.1		7.46E-146	1663.99	75
YDR075W.1		6.38E-145	1767.63	161
YBR143C.1		2.57E-133	1394.68	97
YMR238W.1		2.94E-132	1536.98	47
YOR155C.1		6.32E-128	1899.88	51
YDL216C.9		1.85E-116	1368.67	306
YML078W.1		2.97E-115	2044.47	131
YJR126C.2		5.50E-113	1490.08	59
YDL179W.1		5.69E-113	1557.21	117
YMR104C.1		8.18E-110	1562.71	189





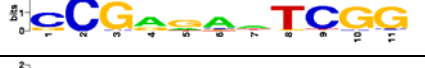

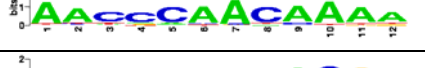
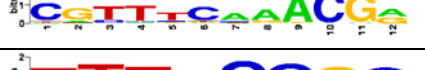


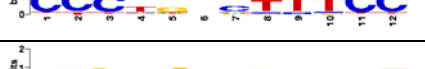
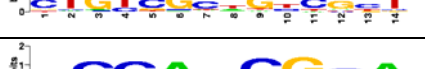







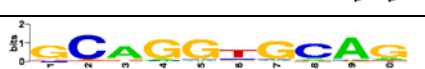
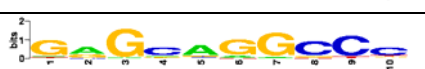
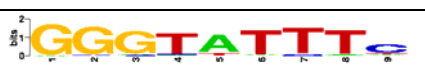

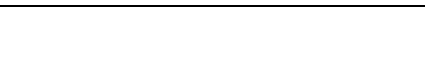
YOR098C.1		2.25E-107	1234.25	120
YKL222C.1		9.15E-101	1062.05	505
YIL067C.5		1.78E-99	1339.53	263
YLR012C.2		1.07E-96	995.66	135
YMR260C.1		1.02E-95	904.91	69
YOL071W.3		9.51E-95	877.99	170
YLR249W.7		3.29E-94	1093.95	24
YDR267C.1		2.36E-93	1069.9	44
YCR024C.1		6.42E-93	1345.65	131
YGR091W.1		1.12E-92	1255.13	264
YNL188W.1		2.76E-90	1628.53	50
YIL067C.6		5.75E-89	1304.29	83
YPL132W.1		6.33E-87	1335.2	136
YGR093W.1		2.60E-86	1192.9	326
YGR096W.1		1.98E-83	1018.3	188
YDR002W.1		4.00E-82	971.64	283
YHR059W.1		5.47E-81	1537.6	605
YGL021W.4		6.68E-78	1120.38	40
YBL098W.3		1.40E-77	576.33	38
YNL221C.1		2.94E-77	913.21	60
YDR231C.7		1.30E-76	736.96	25
YJR062C.1		1.67E-76	906.1	611
YGL017W.1		1.00E-75	1231.12	415
YML107C.1		3.17E-74	1303.06	404









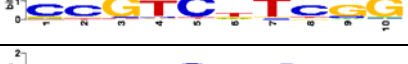


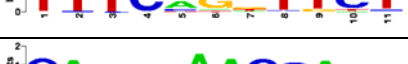

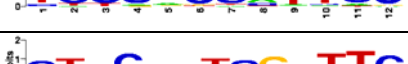







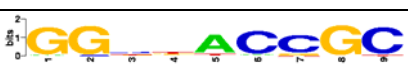

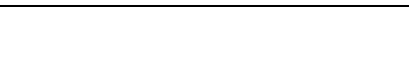
YBR049C.1		8.29E-74	634.91	88
YAL026C.1		1.04E-72	687.96	12
YMR068W.1		1.83E-69	727.41	59
YDR097C.1		2.45E-67	833.38	142
YGR255C.1		5.92E-67	964.11	76
YOR373W.1		1.73E-66	985.76	305
YDR032C.3		3.03E-65	1430.8	160
YJL057C.1		3.69E-65	1187.21	119
YPR066W.1		5.29E-64	1128.03	131
YBR070C.1		5.61E-63	763.88	154
YFL028C.1		5.11E-62	1313.54	126
YLR373C.10		1.91E-61	715.64	713
YIL063C.1		2.45E-61	1033.36	121
YMR108W.5		1.41E-60	695.49	121
YCL050C.1		2.66E-56	466.34	39
YMR111C.1		3.83E-53	882.33	100
YMR134W.2		8.22E-52	506.29	162
YBR252W.1		1.63E-51	1034.61	220
YDR127W.1		2.93E-51	1093.15	270
YMR006C.3		3.09E-51	772.25	345
YDR276C.1		3.10E-51	687.44	113
YNL252C.7		3.11E-51	570.12	56
YJR010W.1		2.11E-50	448.08	53
YDL206W.1		5.50E-50	1122.67	109



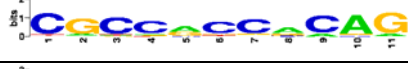








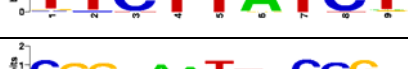



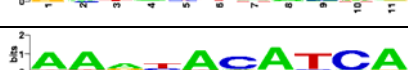


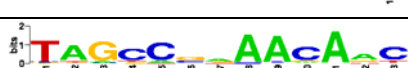
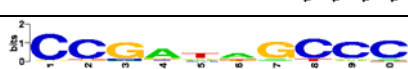


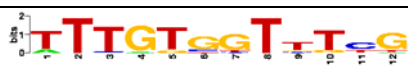
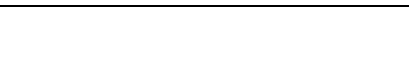
YMR134W.3		1.02E-49	393.72	46
YER105C.10		3.40E-49	607.68	69
YOR156C.1		3.25E-48	679.14	254
YBL098W.7		5.59E-48	618.57	37
YDR321W.1		5.81E-48	461.04	22
YHL035C.9		1.22E-47	451.35	146
YPL069C.1		2.48E-47	578.16	59
YLR369W.1		5.42E-47	805.33	19
YLR307W.1		1.15E-46	945.63	34
YDR322W.1		2.87E-45	599.26	41
YKL149C.4		8.26E-45	598.16	148
YDR263C.3		1.52E-44	455.7	13
YBR151W.3		2.44E-44	767.13	69
YBL098W.9		2.47E-44	537.12	12
YPL132W.5		3.55E-44	670.3	23
YMR241W.1		4.23E-44	464.79	56
YBR200W.1		9.52E-44	772.76	37
YEL061C.1		1.57E-43	612.1	78
YGR094W.7		3.47E-42	581.23	141
YOL011W.1		5.33E-42	573.88	48
YOR129C.1		1.02E-41	672.53	36
YDR255C.2		4.99E-41	424.46	11
YJR117W.1		5.08E-41	856.23	70
YMR210W.4		1.03E-39	407.89	34



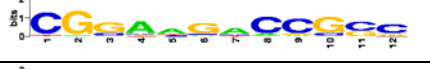




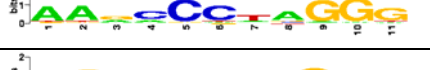











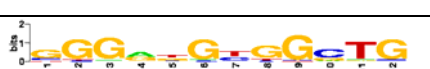
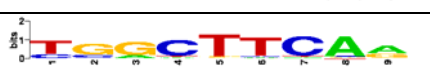

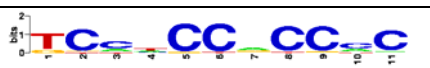
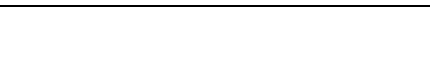
YLR055C.1		5.01E-39	439.69	208
YNL144C.10		1.24E-38	287.65	34
YKL033W-A.7		1.83E-38	671.02	13
YKL205W.1		1.85E-38	553.61	140
YKL073W.10		5.21E-38	475.75	33
YOR089C.1		7.41E-38	392.2	38
YMR251W-A.6		8.23E-38	179.57	14
YMR291W.1		6.13E-37	428.56	38
YOR177C.9		1.04E-36	567.47	23
YER022W.1		3.82E-36	655.16	76
YNL080C.1		4.51E-36	473.43	104
YPL074W.1		4.80E-36	480.45	28
YER028C.1		5.95E-36	313.73	29
YNL009W.10		1.22E-35	337.89	19
YML105C.4		4.16E-35	466.44	48
YPR122W.1		9.60E-35	790.98	217
YBR260C.1		1.21E-34	691.79	120
YOR341W.1		2.03E-34	357.37	116
YGL007W.2		2.11E-34	457.89	628
YDL028C.7		2.24E-34	582.47	40
YOR280C.5		4.59E-34	235.64	19
YEL009C.6		6.95E-33	274.09	16
YPL060W.1		8.43E-33	849.26	37
YBR200W.3		1.00E-32	721.87	125

YLR167W.1		5.64E-32	714.64	157
YKL114C.3		7.19E-32	520.67	44
YDL129W.3		2.40E-31	415.61	93
YHL030W.8		2.63E-31	468.52	99
YDR458C.7		5.63E-31	675.39	53
YGL097W.1		1.26E-30	512.52	156
YMR206W.1		4.37E-30	347.85	50
YGL005C.1		7.89E-30	496.19	70
YER110C.6		1.06E-29	528.7	17
YNR034W.2		1.10E-29	517.01	46
YNL161W.1		1.72E-29	504.39	21
YBR215W.3		2.24E-29	474.92	27
YLR276C.10		5.03E-29	548.91	64
YOR165W.1		1.95E-28	348.02	125
YLR392C.1		7.07E-28	448.17	179
YKR061W.1		1.06E-27	761.55	67
YJR007W.1		1.39E-27	396.92	20
YJL005W.7		2.14E-27	371.45	86
YGR110W.1		2.20E-27	496.77	108
YBR158W.1		5.87E-27	397.79	24
YMR180C.3		1.77E-26	505.13	65
YBR166C.5		2.60E-26	918.35	64
YLR264W.1		1.19E-25	756.28	53
YBR286W.8		1.42E-25	374.8	11




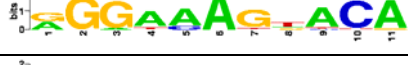




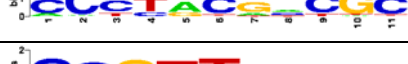
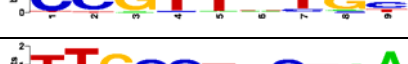
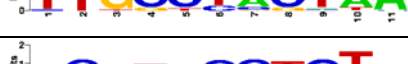

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YNL165W.6		6.16E-25	254.56	31
YPR021C.6		2.11E-24	206.47	13
YOL126C.4		3.73E-24	346.85	73
YPL202C.8		4.47E-24	323.78	17
YHR088W.1		5.24E-24	538.97	42
YOR377W.2		7.80E-24	474.94	32
YLR292C.2		1.20E-23	299.73	33
YML003W.2		1.66E-23	324.14	242
YJL180C.3		5.01E-23	692.66	544
YGR218W.8		5.35E-23	413.1	26
YDR322W.7		8.67E-23	334.32	15
YDR519W.1		1.08E-22	571.29	75
YEL048C.3		1.76E-22	560.97	52
YCL057C-A.5		2.42E-22	198.72	17
YMR319C.1		2.63E-22	470.29	43
YGR120C.3		3.52E-22	357.83	68
YOL126C.5		3.84E-22	198.13	10
YIL119C.1		5.35E-22	184.93	12
YOL034W.1		5.57E-22	539.08	104
YPR070W.1		6.24E-22	412.66	30
YER165W.9		6.83E-22	328.65	30
YJL132W.9		2.16E-21	333.09	101
YIL055C.7		2.48E-21	172.76	20

YLR075W.3		2.52E-21	128.21	10
YOR321W.9		3.22E-21	305.67	230
YJR075W.5		8.81E-21	695.19	77
YDR297W.7		8.94E-21	204.63	40
YDR345C.1		8.97E-21	312.47	26
YGL180W.8		9.11E-21	256.83	15
YNL221C.7		9.21E-21	321.76	67
YJR094W-A.9		1.70E-20	316.81	19
YDR139C.6		2.35E-20	481.25	27
YLR175W.9		8.60E-20	527.27	73
YNL275W.3		9.82E-20	384.4	30
YNL078W.10		1.21E-19	293.28	152
YNL069C.4		1.23E-19	287.19	18
YCR011C.3		1.77E-19	270.24	10
YLR372W.1		2.27E-19	276.73	13
YLR356W.6		2.70E-19	198.47	15
YGR263C.1		3.13E-19	429.86	60
YNL080C.6		3.63E-19	197.26	40
YBL055C.1		3.70E-19	288.88	251
YPR004C.1		8.92E-19	485.54	85
YER034W.8		1.48E-18	213.48	43
YOR120W.5		7.21E-18	236.16	20
YDL091C.3		8.54E-18	270.53	20
YLL024C.4		9.94E-18	467.71	121

YLL054C.2		1.51E-17	286.89	20
YHR152W.3		1.65E-17	379.21	52
YER042W.9		2.85E-17	308.01	20
YBL013W.6		3.01E-17	184.15	27
YER122C.10		3.34E-17	280.93	22
YHR046C.2		5.05E-17	308.75	54
YPL273W.2		1.62E-16	358.65	34
YHR046C.5		2.10E-16	526.71	80
YGL070C.9		2.40E-16	220.32	19
YLL054C.3		3.41E-16	346.65	37
YMR142C.1		3.63E-16	185.94	15
YJR001W.4		5.85E-16	237.55	29
YEL021W.1		8.84E-16	333.22	26
YGR075C.9		9.43E-16	177.49	17
YJR075W.6		1.24E-15	425.35	32
YBL014C.9		1.34E-15	171.6	10
YLR414C.6		1.56E-15	529.17	36
YNL055C.3		1.90E-15	178.5	10
YDR214W.7		2.94E-15	312.83	16
YML073C.3		3.51E-15	229.75	10
YGL001C.9		3.66E-15	304.73	18
YDR531W.1		4.20E-15	254.73	34
YDR218C.10		4.48E-15	538.69	108
YOR176W.4		4.89E-15	153.26	22

YER028C.7		5.62E-15	178.98	23
YKL096W.9		1.04E-14	188.1	17
YOL001W.10		1.10E-14	237.44	5
YLR132C.2		1.34E-14	173.31	10
YGL229C.5		3.35E-14	150.79	11
YOR079C.1		3.75E-14	338.75	34
YDL204W.8		3.80E-14	275.57	54
YDL111C.4		5.05E-14	459.87	18
YHR185C.9		5.72E-14	403.12	27
YCR002C.7		9.83E-14	225.05	19
YBR043C.9		1.56E-13	198.47	14
YHL039W.9		2.18E-13	139.57	15
YOR319W.9		3.23E-13	222.09	34
YJL057C.4		3.55E-13	630.5	220
YDR468C.6		4.54E-13	407.62	35
YCL052C.10		5.56E-13	223.92	65
YOR175C.9		6.50E-13	228.84	14
YIL011W.9		1.13E-12	235.21	28
YER129W.8		1.41E-12	201.73	26
YOR317W.8		3.70E-12	194.49	31
YPR194C.2		4.29E-12	199.25	20
YKL011C.1		6.78E-12	397.36	51
YGL256W.10		1.04E-11	127.53	8
YER178W.3		1.16E-11	171.56	13

YLR098C.9		1.75E-11	176.57	15
YBR200W.10		1.87E-11	140.3	13
YKL140W.2		2.84E-11	488.88	121
YLR098C.10		3.85E-11	127.93	12
YDR318W.5		4.47E-11	179.49	8
YBL049W.9		8.15E-11	160.79	13
YEL029C.3		1.71E-10	162.11	51
YOR363C.1		2.13E-10	140.91	15
YOL028C.4		2.26E-10	158.55	21
YPL226W.9		4.30E-10	273.1	37
YOR373W.10		4.18E-09	157.8	13
YEL036C.10		9.28E-09	249.56	85
YOR002W.2		1.46E-08	106.51	10
YPL117C.9		1.57E-08	102.31	7
YPL258C.1		1.87E-08	151.56	11
YLR405W.6		2.43E-08	248.17	9
YIL021W.2		2.50E-08	125.91	14
YEL003W.2		5.36E-08	175.77	17
YKL071W.1		5.48E-08	140.04	12
YOR298W.2		8.47E-08	108.8	11
YGL124C.3		2.67E-07	104.76	11
YMR036C.4		3.41E-07	252.1	16
YLR116W.5		3.84E-07	181.82	21
YGR097W.5		3.90E-07	150.12	70

YOL027C.9		6.94E-07	104.07	11
YJL130C.1		7.40E-07	280.78	13
YMR105C.9		9.94E-07	118.07	15
YNL257C.5		1.23E-06	164.55	15
YOR108W.7		1.58E-06	329.71	30
YKR015C.8		1.65E-06	141.32	13
YOR245C.3		3.02E-06	129.96	11
YBR080C.3		4.28E-06	108.33	10
YGR263C.10		4.50E-06	247	21
YJL091C.2		8.39E-06	366.45	27
YCR033W.5		8.51E-06	119.5	10
YDR279W.5		8.67E-06	271.72	54

This table summarizes the 296 PHYLONET motifs. Column 1: Unique identifier of the motif. The identifier contains the query gene system name and an index representing the rank of this motif among all qualified motifs identified for this query gene. Column 2: Sequence logo of the motif generated using custom software. Column 3: *P* value of the motif. Column 4: Total Average Log-likelihood Ratio (ALLR) score of the motif. Column 5: Size of the cluster of genes that share the motif.