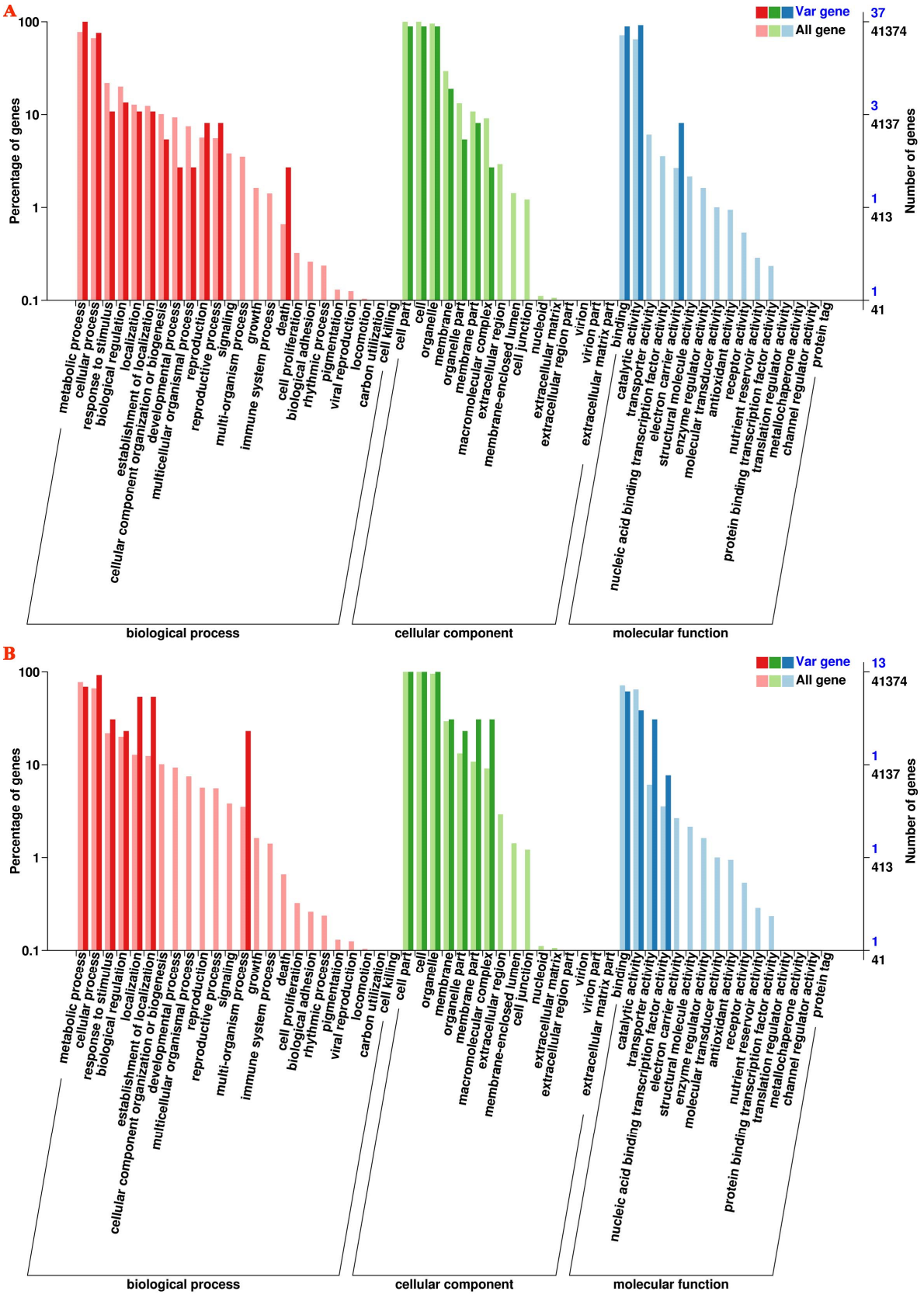

Figure S1: Gene ontology (GO) plot of the genes locating at a region of ±10 kb near to the significant s. A. 2016; B. 2017

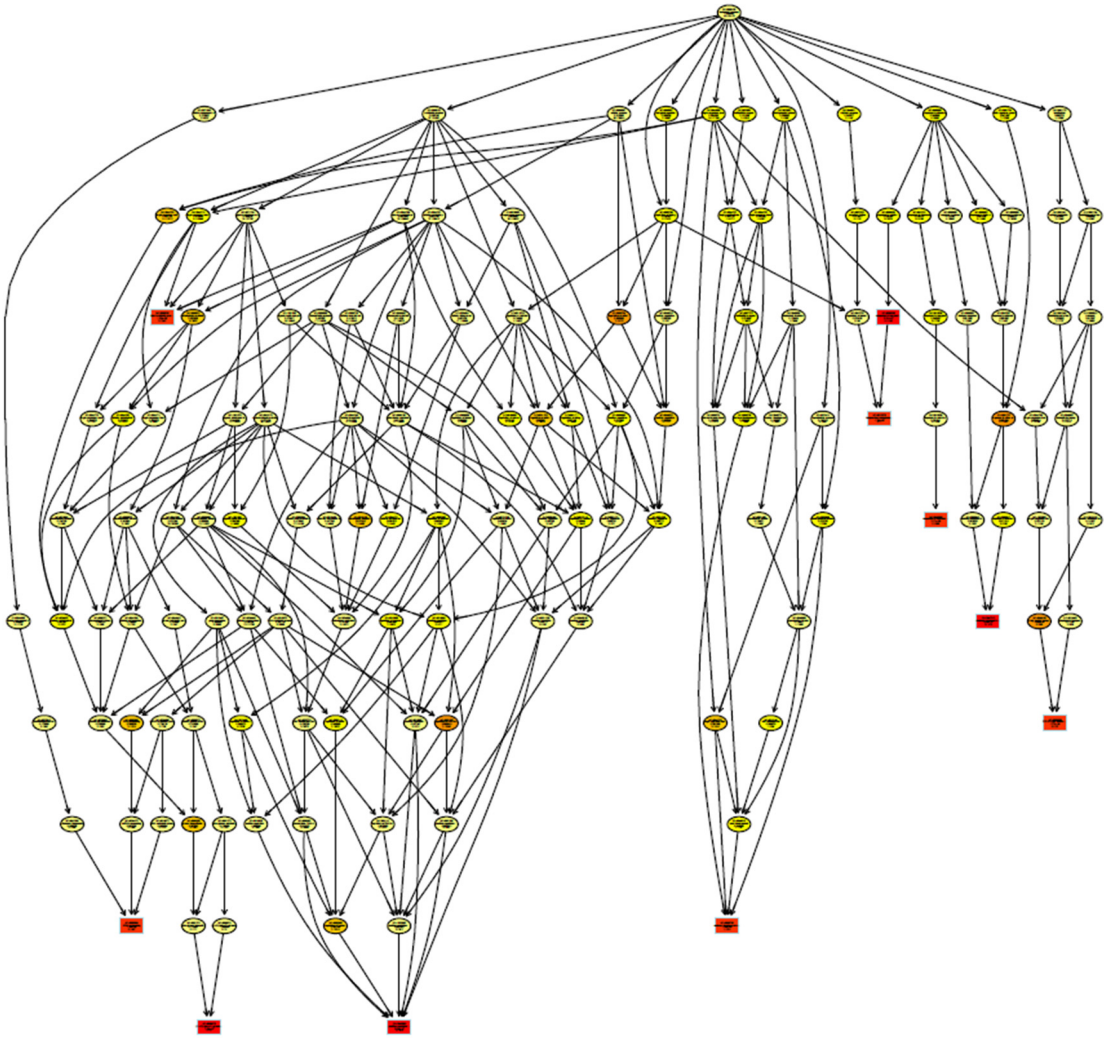

Figure S2: TopGO analysis of the genes locating at a region of ±10 kb near to the significant SNPs for biological process in 2016

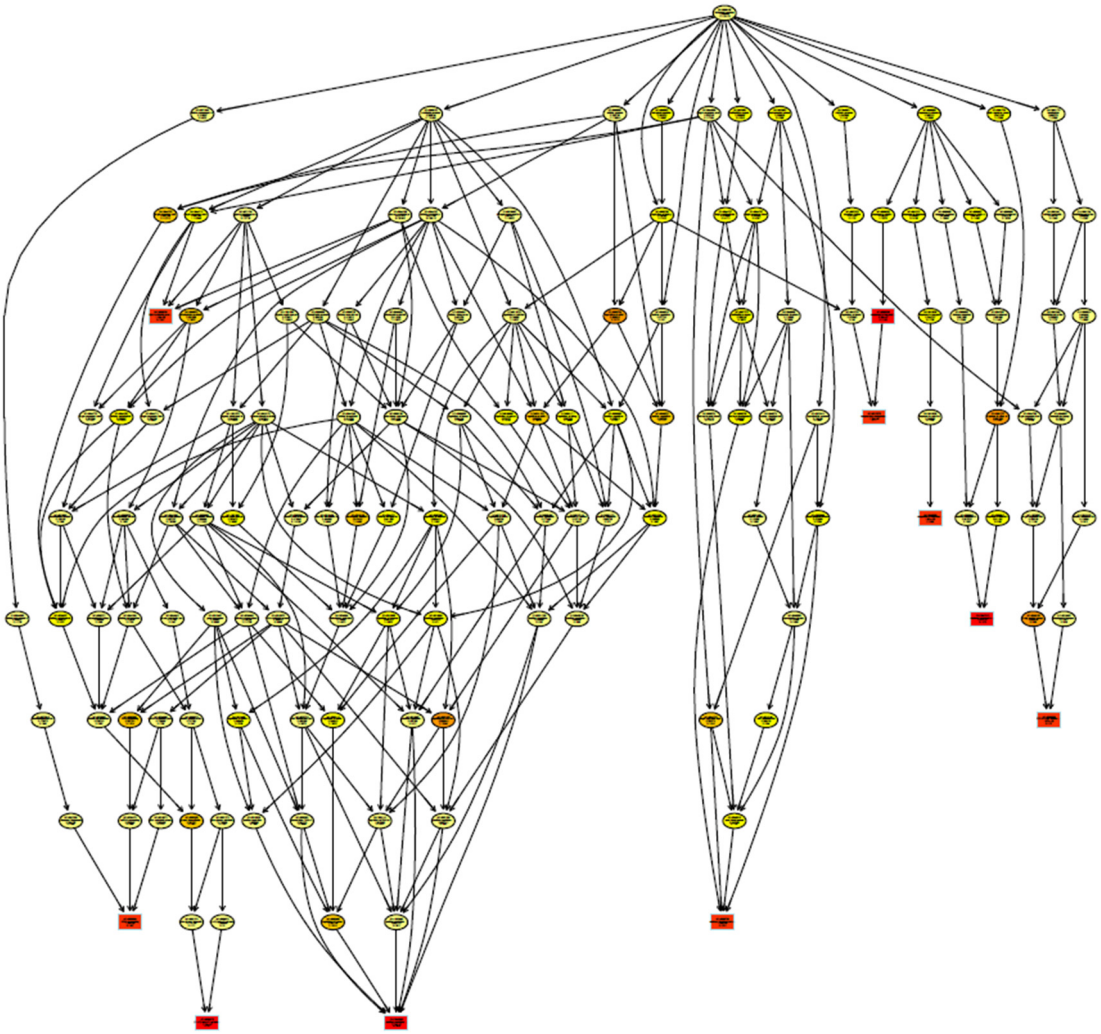

Figure S3: TopGO analysis of the genes locating at a region of ±10 kb near to the significant SNPs for biological process in 2017

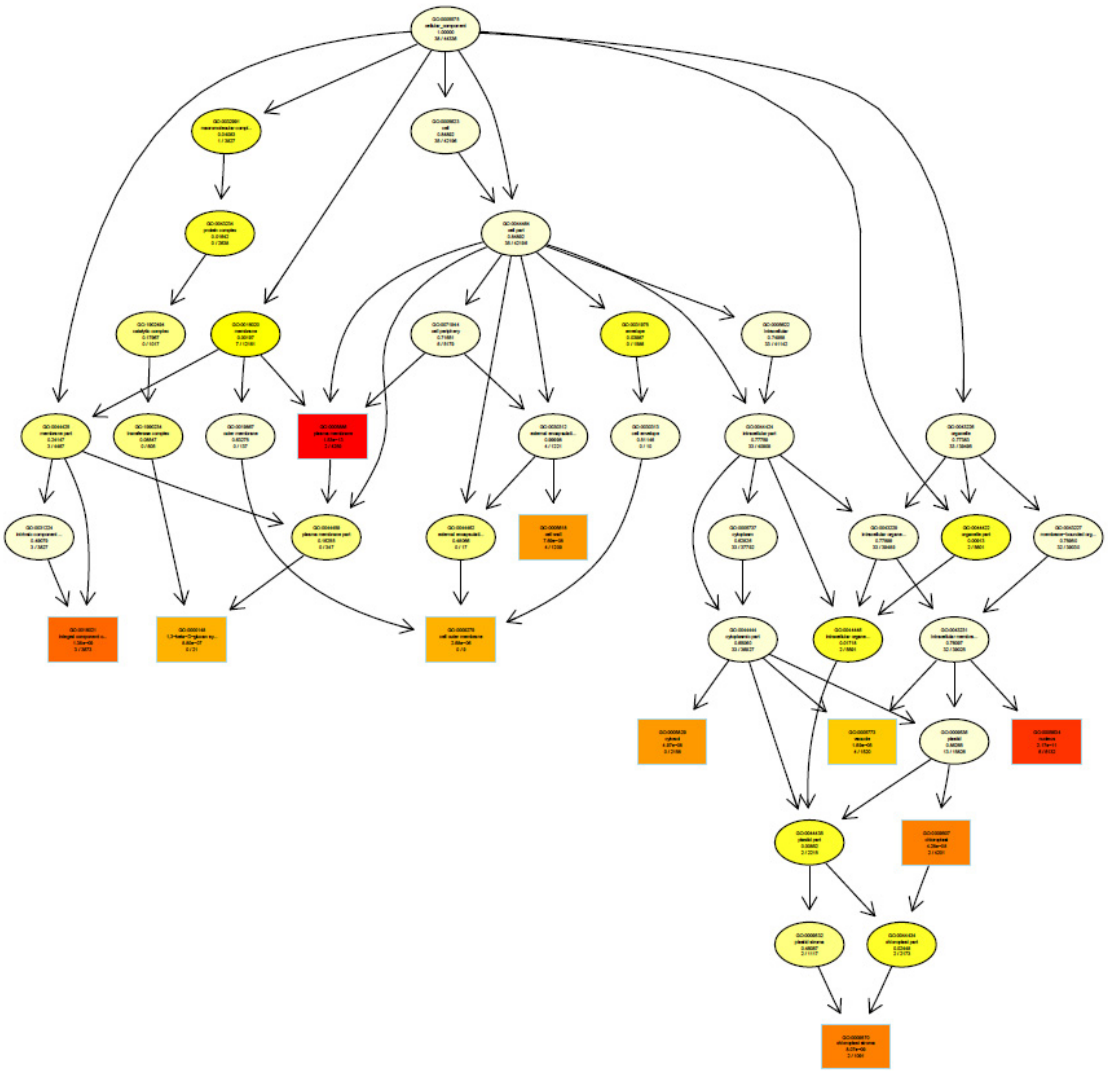

Figure S4: TopGO analysis of the genes locating at a region of ±10 kb near to the significant SNPs for cellular component in 2016

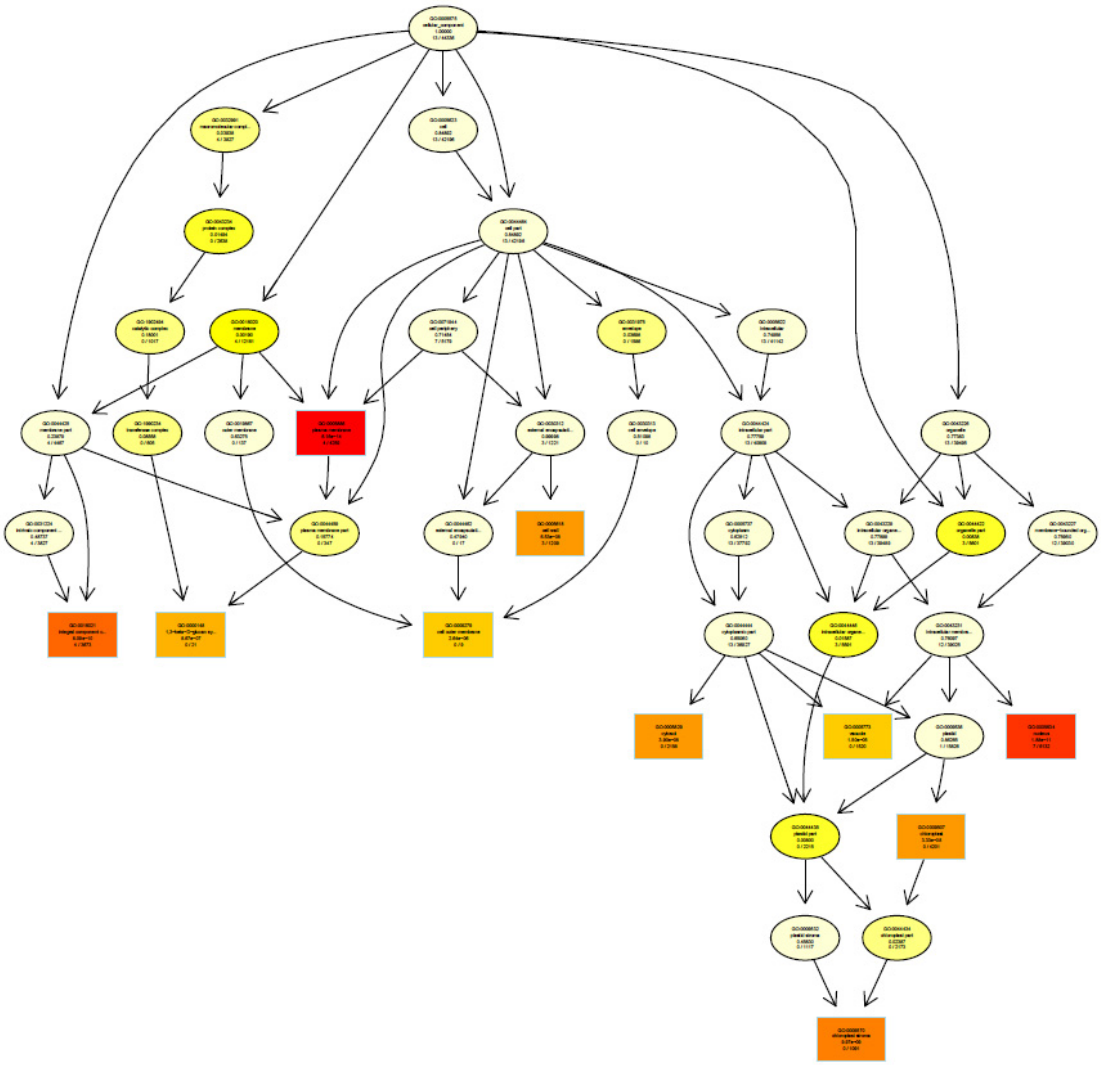

Figure S5: TopGO analysis of the genes locating at a region of ±10 kb near to the significant SNPs for cellular component in 2017

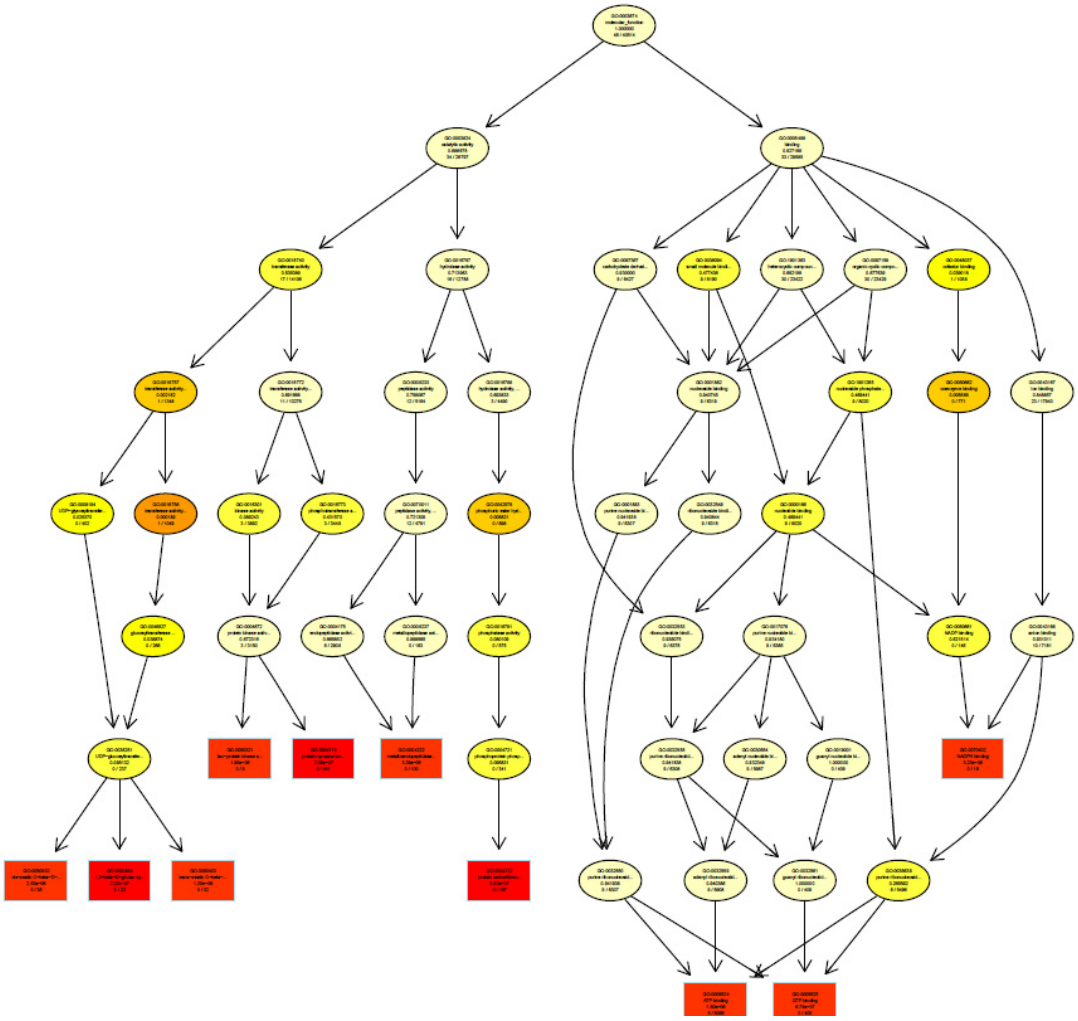

Figure S6: TopGO analysis of the genes locating at a region of ±10 kb near to the significant SNPs for molecular function in 2016

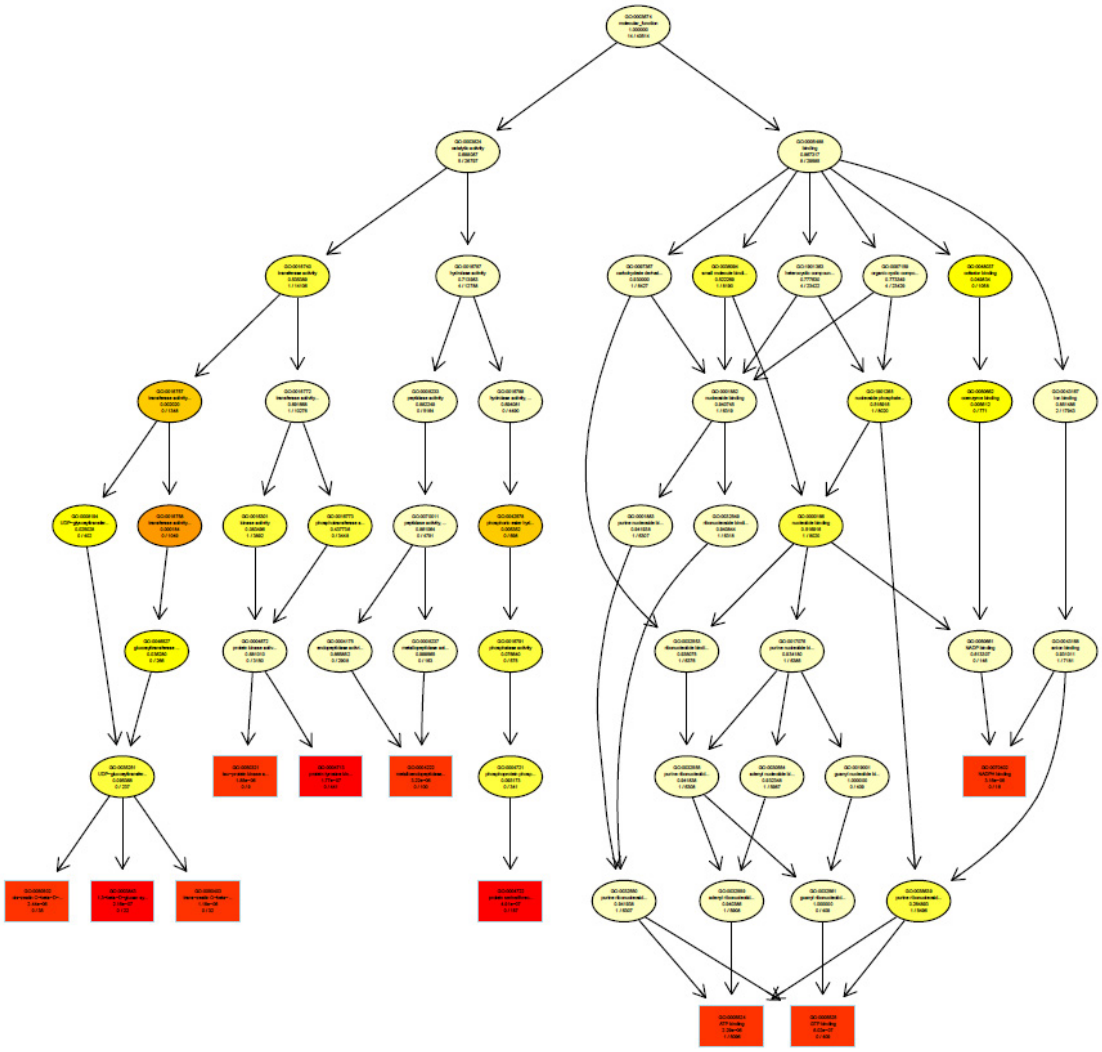

Figure S7: TopGO analysis of the genes locating at a region of ±10 kb near to the significant SNPs for molecular function in 2017

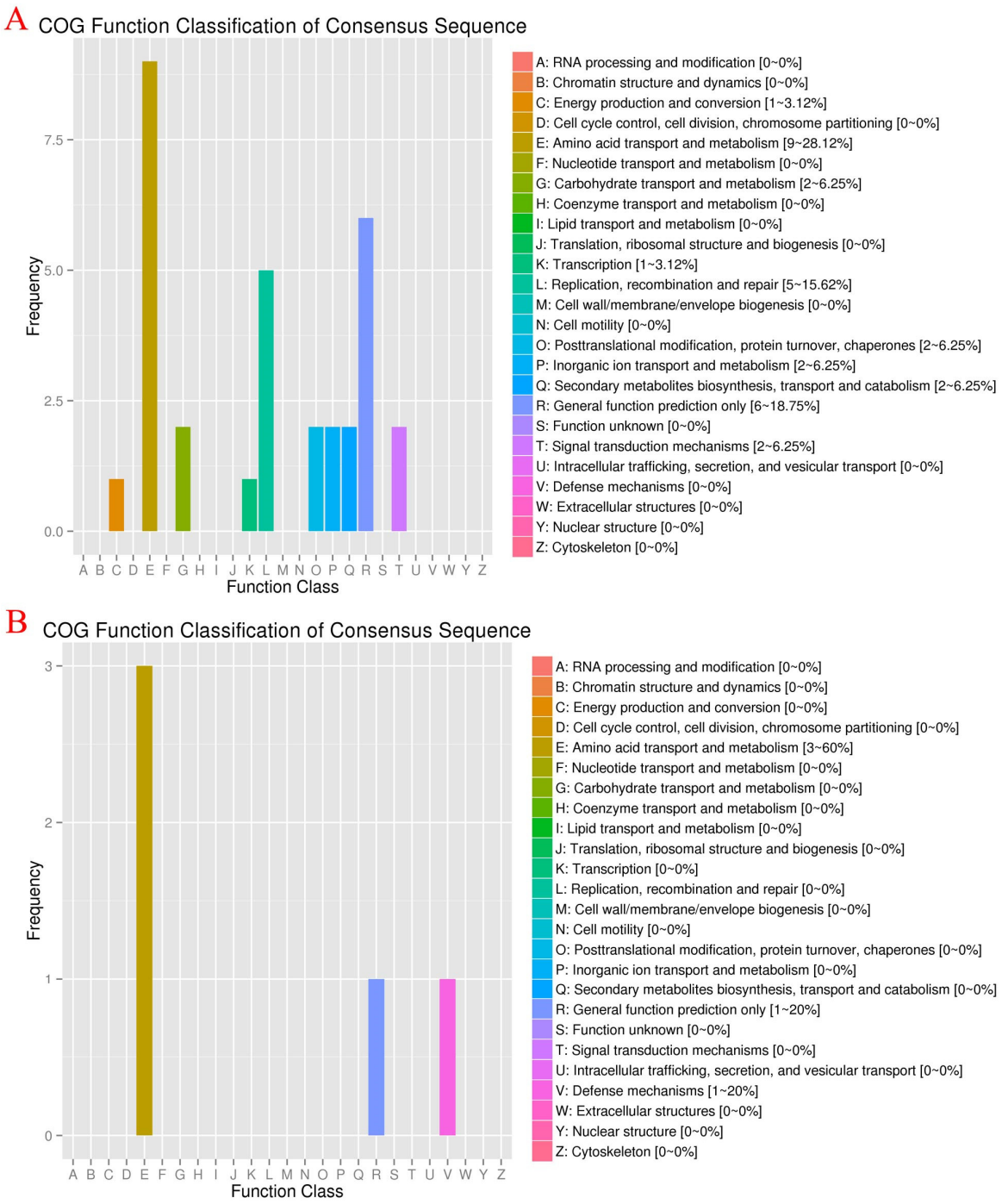

Figure S8: Cluster of orthologous groups of proteins (COG) function classification of the genes locating at a region of ±10 kb near to the significant SNPs. A. 2016; B. 2017

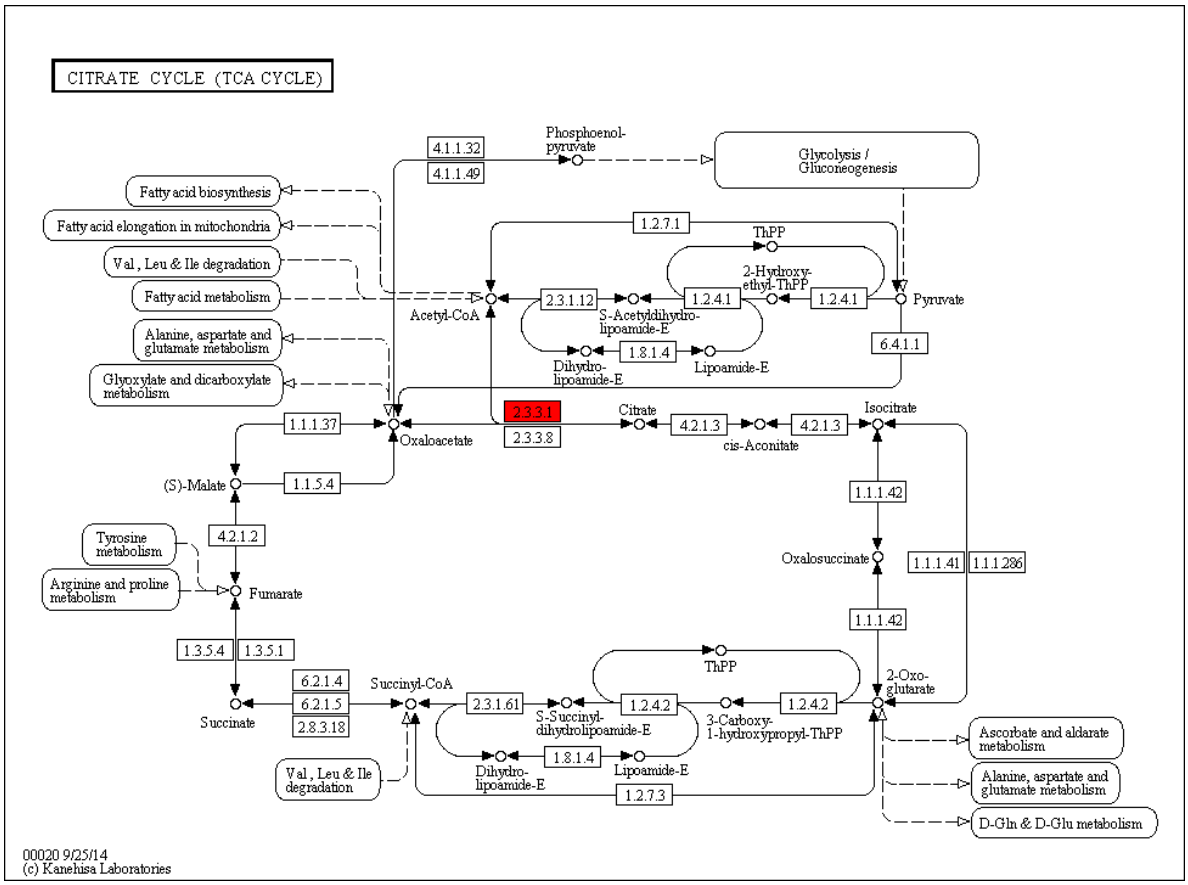

Figure S9: TCA cycle pathway for the genes locating at a region of ±10 kb near to the significant SNPs by the KEGG pathway database in 2016

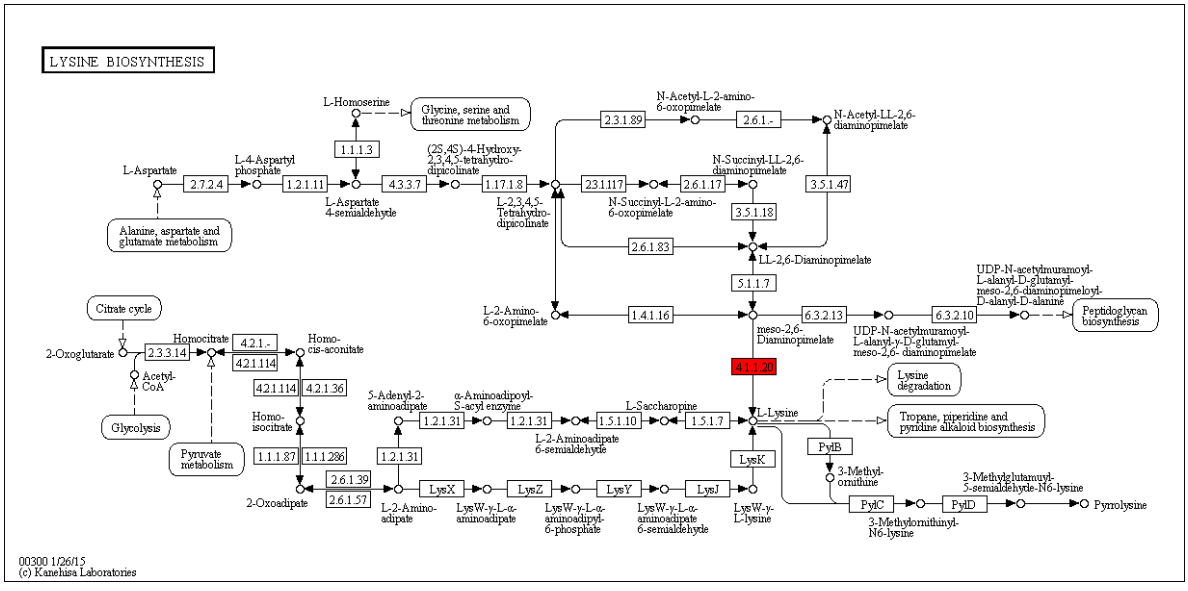

Figure S10: Lysine biosynthesis pathway for the genes locating at a region of ±10 kb near to the significant SNPs by the KEGG pathway database in 2016

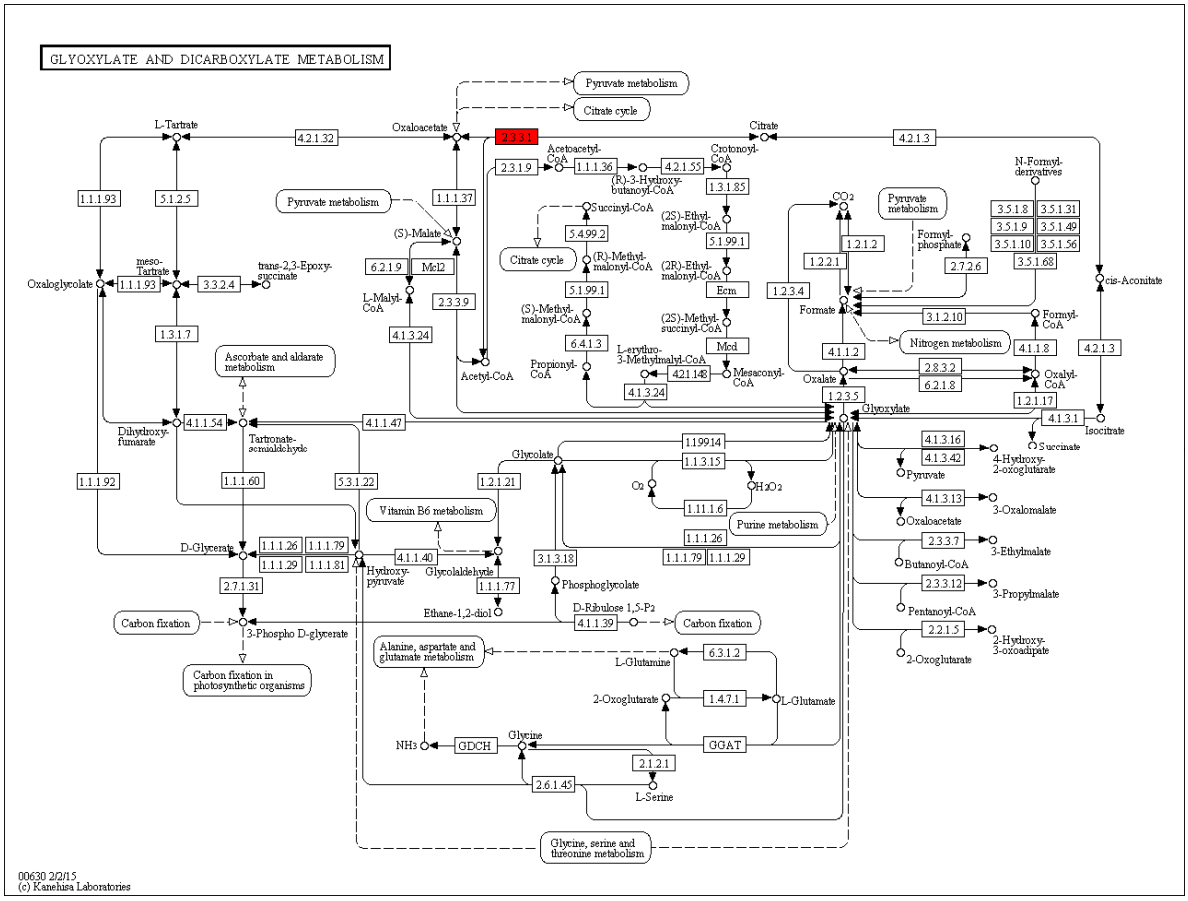

Figure S11: Glyoxylate and dicarboxylate metabolism pathway for the genes locating at a region of ±10 kb near to the significant SNPs by the KEGG pathway database in 2016

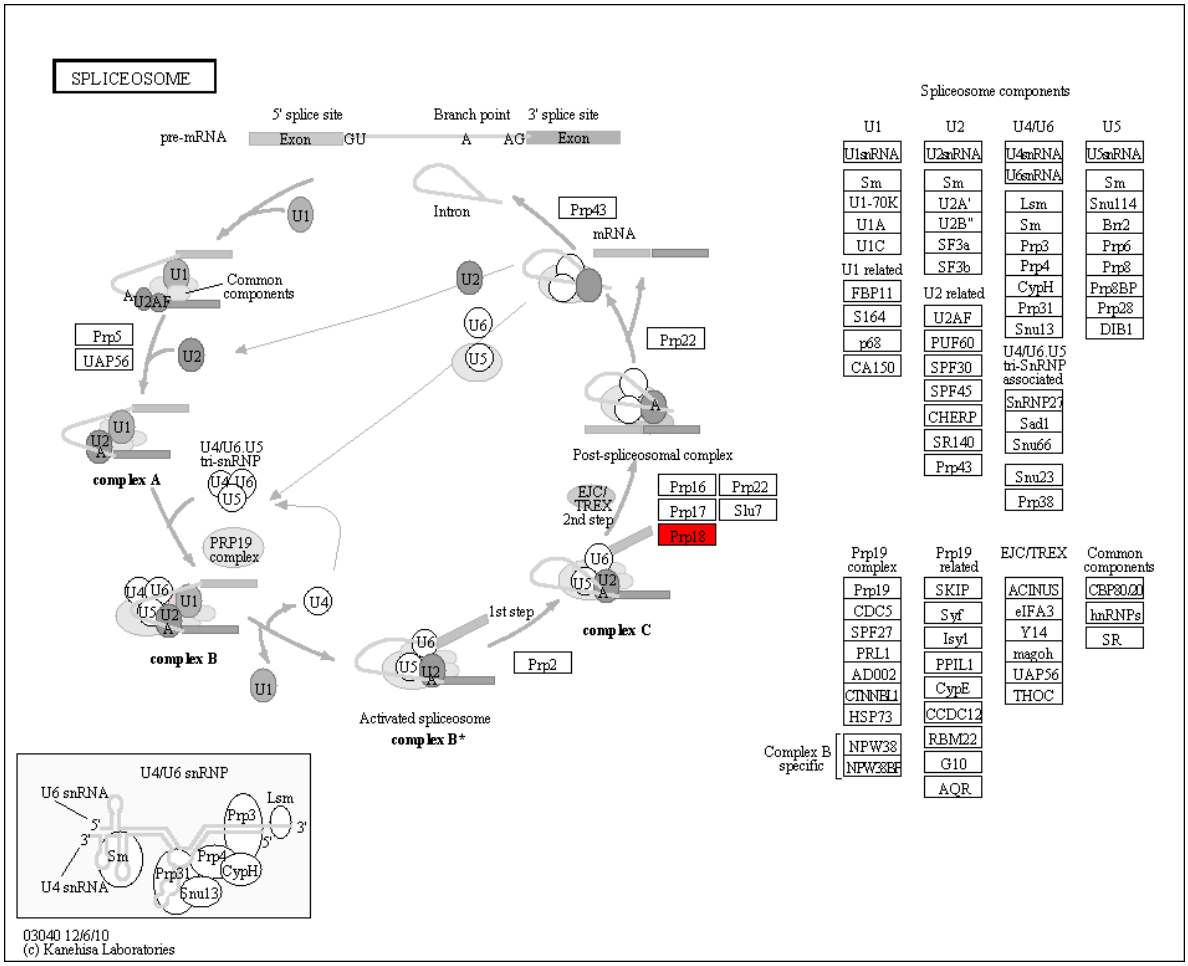

Figure S12: Spliceosome pathway for the genes locating at a region of ±10 kb near to the significant SNPs by the KEGG pathway database in 2017

Table S1: Accessions, variety names, origin, germplasm types and ShB resistance of 150 rice varieties in Ting's core collection

Acc.	Variety names	Origin	*Indica* vs. *Japonica*	Lesion lenght/plant height		Acc.	Variety names	Origin	*Indica* vs. *Japonica*	Lesion lenght/plant height	
				2016	2017					2016	2017
CC1	Yin guang	Japan	*J*	0.024±0.010	0.288±0.164	CC76	Guang ye hong mi	South China	*I*	0.051±0.023	0.060±0.030
CC2	Ao guo 5-B	Japan	*J*	missing	missing	CC77	Da nuo	South China	*I*	0.056±0.059	0.174±0.024
CC3	Ai you	Japan	*J*	0.040±0.050	0.136±0.069	CC78	Bai xu	South China	*I*	0.038±0.034	0.078±0.024
CC4	Tie geng yi shi ao	Yangtze River region	*J*	missing	missing	CC79	Mao he	South China	*I*	missing	missing
CC5	Guo zhu	Japan	*J*	0.160±0.146	0.230±0.091	CC80	Xu zai	South China	*I*	0.057±0.015	0.054±0.005
CC6	Ben dao	North China	*J*	0.118±0.114	0.193±0.008	CC81	Dong an hou zi pu xiao he	Central China	*I*	0.033±0.031	0.074±0.012

CC 7	Mang shui dao	Yangtze River region	*J*	missing	missing	CC82	Tie gu pao	Central China	*I*	0.058±0.025	0.182±0.085
CC 8	Bai mang gao li han dao bai	North China	*J*	missing	missing	CC83	Chi mao zhan	South China	*I*	0.104±0.073	0.064±0.022
CC 9	Jiu yue han	Northeast China	*J*	0.029±0.0015	0.074±0.040	CC84	Hu bei zao	Central China	*I*	0.085±0.046	0.145±0.020
CC 10	Bi jie ma wei hong gu	Yunnan-Kweichow Plateau	*J*	missing	missing	CC85	Ya jing mi	South China	*I*	0.156±0.194	0.192±0.033
CC 11	Ai da tou	Yangtze River region	*J*	missing	missing	CC86	Ba shi zi	Central China	*I*	0.068±0.028	0.067±0.036
CC 12	Gui zao bai he	Yangtze River region	*J*	0.238±0.178	0.415±0.248	CC87	Dong jun zi	Central China	*I*	missing	missing
CC 13	Xiang dao	North China	*J*	0.050±0.0016	0.054±0.022	CC88	Early pradifice	Unknown	*I*	0.024±0.010	0.031±0.008
CC 14	Zi jin gu	Northeast China	*J*	0.071±0.0009	0.057±0.029	CC89	Nuo	South China	*I*	0.044±0.018	0.076±0.019
CC 15	Xiang chuan	Japan	*J*	missing	missing	CC90	Gui zhao he 2	Japan	*I*	missing	missing
CC 16	Nagabo	Taiwan	*J*	0.109±0.0057	0.060±0.03	CC91	Hei nuo	Unknown	*I*	0.401±0.569	0.110±0.014
CC 17	Bai ke da nuo	South China	*J*	0.022±0.0024	0.063±0.010	CC92	Da yi mao	Central China	*I*	0.028±0.034	0.055±0.019
CC 18	San pai zhong	South China	*J*	0.266±0.1036	0.045±0.024	CC93	Gai cao zhan	Central China	*I*	0.070±0.052	0.088±0.063
CC 19	Kai xuan	Japan	*J*	0.118±0.0062	0.054±0.022	CC94	Gamal	Unknown	*I*	missing	missing
CC 20	Shi ban zhan	North China	*J*	0.034±0.0024	0.054±0.005	CC95	Bu gou wei	South China	*I*	0.073±0.024	0.104±0.060
CC 21	Hei ke da nuo	South China	*J*	0.120±0.0093	0.253±0.190	CC96	Bai ke xi nuo	South China	*I*	0.058±0.041	0.104±0.009
CC 22	Shen shui wan dao	Yangtze River region	AD	0.158±0.0060	0.061±0.040	CC97	Ben dao	North China	*I*	0.118±0.114	0.193±0.008
CC 23	Hong ben dao	Yangtze River region	AD	0.154±0.0044	0.351±0.158	CC98	Ba xian shu	Japan	*I*	0.065±0.020	0.056±0.022
CC 24	Duan mang zi jin gu	Northeast China	AD	0.080±0.0025	0.043±0.034	CC99	Guang hong mi dao	Yangtze River region	*I*	0.005±0.007	0.124±0.032
CC 25	Bei jing jiang mi	North China	AD	0.134±0.0090	0.047±0.022	CC100	Wu mang yan guo qing	North China	*I*	0.009±0.008	0.122±0.033
CC 26	Daeri	Celebes	AD	0.249±0.2010	0.056±0.024	CC101	Chang xu nuo	South China	*I*	0.094±0.072	0.162±0.044
CC 27	Jian tou nuo	South China	AD	0.032±0.0015	0.037±0.012	CC102	Jiang wan 15	Central China	*I*	0.074±0.075	0.080±0.025
CC 28	Long you man dao	Yangtze River region	AD	missing	missing	CC103	Bai hua er	South China	*I*	0.054±0.036	0.085±0.054
CC 29	Kun shan zhu zhou dao	Yangtze River region	AD	0.038±0.0015	0.145±0.121	CC104	Liu chang xian	South China	*I*	0.079±0.006	0.093±0.014
CC 30	Huang ke zao 2	Yangtze River region	AD	0.006±0.0008	0.109±0.035	CC105	Bai yin 3	South China	*I*	0.065±0.014	0.084±0.020
CC 31	Sheng fang da bai gu	North China	AD	0.044±0.0058	0.244±0.175	CC106	Shui zao huang pi	South China	*I*	0.062±0.026	0.158±0.096

CC 32	Xiao dou	Japan	AD	0.039±0.00 34	0.054±0.0 02	CC1 07	Yin 2 dong 7	South China	*I*	0.045±0. 024	0.087±0. 046
CC 33	Poetih	Celebes	AD	missing	missing	CC1 08	Hou ma	South China	*I*	0.168±0. 234	0.047±0. 010
CC 34	Tebaro	Sumbawa	AD	0.045±0.00 15	0.126±0.1 11	CC1 09	Dong zhu 2	South China	*I*	0.001±0. 001	0.074±0. 018
CC 35	Ao hua da gui tou hong	Yangtze River region	AD	0.152±0.00 97	0.234±0.0 70	CC1 10	Hong gen da mi	South China	*I*	0.059±0. 073	0.090±0. 048
CC 36	Hui bei zi	Yunnan-Kweichow Plateau	AD	0.074±0.00 85	0.074±0.0 45	CC1 11	Ben cheng guan yin zhan	Central China	*I*	0.050±0. 060	0.076±0. 018
CC 37	Ba shi zi	Yangtze River region	AD	0.068±0.00 28	0.067±0.0 37	CC1 12	Xi miao gu	South China	*I*	0.024±0. 008	0.058±0. 005
CC 38	Zao sheng da ye	Japan	AD	0.043±0.00 42	0.077±0.0 64	CC1 13	186-zao guan yin zhan	Central China	*I*	0.046±0. 004	0.157±0. 027
CC 39	Bnlastog	Low latitude region	*I*	0.097±0.00 57	0.185±0.0 42	CC1 14	Chang mang hei ma zao	Yunnan	*I*	0.054±0. 012	0.252±0. 211
CC 40	Nuo mi	North China	*I*	0.060±0.00 25	0.048±0.0 07	CC1 15	Shui tian zhan gu nuo	South China	*I*	0.084±0. 059	0.183±0. 059
CC 41	Xi chuan huang liu	South China	*I*	0.084±0.00 28	0.107±0.0 20	CC1 16	Chang han da hua ke	South China	*I*	0.048±0. 042	0.248±0. 189
CC 42	Hei ju dao	Yangtze River region	*I*	0.095±0.00 68	0.169±0.0 91	CC1 17	Da he	South China	*I*	0.098±0. 111	0.176±0. 072
CC 43	Guang fuI	Taiwan	*I*	0.127±0.00 12	0.132±0.0 58	CC1 18	Zeng cheng hei nuo	South China	*I*	missing	missing
CC 44	Zhong qi jia qing	Yangtze River region	*I*	0.108±0.10 16	0.197±0.0 14	CC1 19	Mao he	South China	*I*	missing	missing
CC 45	III-49-4xi chuan huang	Taiwan	*I*	0.104±0.00 25	0.057±0.0 29	CC1 20	Bai gu zhan	Central China	*I*	0.085±0. 047	0.053±0. 009
CC 46	Xin xian li	Yangtze River region	*I*	missing	missing	CC1 21	Die zhi	South China	*I*	0.084±0. 011	0.083±0. 052
CC 47	Da liu tiao dao	Yangtze River region	*I*	0.035±0.00 45	0.062±0.0 24	CC1 22	You zhan	South China	*I*	0.034±0. 004	0.041±0. 009
CC 48	Bai ke	South China	*I*	missing	missing	CC1 23	Chang sha wu qu wan dao	Central China	*I*	0.046±0. 026	0.134±0. 009
CC 49	Chuan chi 1	Central China	*I*	0.035±0.00 25	0.158±0.1 46	CC1 24	Tong ling hu nan xian	Central China	*I*	0.028±0. 026	0.047±0. 014
CC 50	Tai nong 46	Taiwan	*I*	0.201±0.10 40	0.088±0.0 16	CC1 25	Xiao mao dao	Central China	*I*	0.033±0. 028	0.072±0. 028
CC 51	Ba chong sui	Japan	*I*	0.062±0.00 35	0.045±0.0 09	CC1 26	Jing xian si qu er gan	Central China	*I*	0.027±0. 010	0.075±0. 016
CC 52	Yun nan bai	Central China	*I*	0.046±0.00 78	0.030±0.0 22	CC1 27	Zi xing er qu si dou xu	Central China	*I*	0.027±0. 028	0.158±0. 146
CC 53	Liao yang ben di 4	Northeast China	*I*	0.016±0.00 14	0.243±0.1 49	CC1 28	Chen hui fu dao	Central China	*I*	0.073±0. 090	0.094±0. 025
CC 54	You zhan hong	South China	*I*	missing	missing	CC1 29	Bai gan zi	Central China	*I*	0.232±0. 122	0.084±0. 056
CC 55	Hei nuo	South China	*I*	0.401±0.50 69	0.111±0.0 15	CC1 30	Han lu wei zhan	Central China	*I*	0.016±0. 016	0.175±0. 152
CC 56	Xian zi zhan	Central China	*I*	0.044±0.00 50	0.111±0.0 70	CC1 31	Xin hua san qu tang mao zhan	Central China	*I*	0.023±0. 016	0.048±0. 009

CC 57	Da tou meng	Central China	*I*	missing	missing	CC132	Ta gu zhan	Central China	*I*	0.110±0.026	0.082±0.018
CC 58	Chi bai gan zhan	Central China	*I*	0.080±0.022	0.255±0.164	CC133	Mian tiao zhan	Central China	*I*	0.035±0.006	0.094±0.032
CC 59	Zeng cheng xiang shan zhan	South China	*I*	0.033±0.056	0.122±0.022	CC134	Hu guang zhan	Central China	*I*	0.128±0.109	0.289±0.173
CC 60	Cang wu shan he zhan	South China	*I*	0.045±0.041	0.029±0.015	CC135	Jiang an da ye zao	Central China	*I*	0.014±0.022	0.042±0.015
CC 61	Da gu zao	South China	*I*	0.066±0.058	0.138±0.019	CC136	Tie ban zhan	Central China	*I*	missing	missing
CC 62	Jie yang dong liao zhong	South China	*I*	0.073±0.025	0.083±0.041	CC137	Da gu zao	Central China	*I*	0.060±0.058	0.251±0.216
CC 63	Nan xiong ku gua zao	South China	*I*	0.068±0.046	0.110±0.043	CC138	Ding nan dong zhan	Central China	*I*	0.088±0.014	0.180±0.059
CC 64	Chang mang	South China	*I*	0.026±0.006	0.074±0.022	CC139	Lao wu gu	Central China	*I*	0.049±0.019	0.244±0.128
CC 65	Mandi	Celebes	*I*	0.278±0.138	0.165±0.057	CC140	Xin ban chang ke zi	Central China	*I*	missing	missing
CC 66	Bai gu	South China	*I*	missing	missing	CC141	Bai zhan gu	Central China	*I*	missing	missing
CC 67	Hong zao gu	Yunnan-Kweichow Plateau	*I*	0.037±0.017	0.148±0.030	CC142	Si chuan zhan	Central China	*I*	missing	missing
CC 68	Cang wu shan he zhan	South China	*I*	0.045±0.041	0.029±0.015	CC143	Gao jiao gui hua	Central China	*I*	missing	missing
CC 69	Zao die zhan gu	Central China	*I*	0.016±0.010	0.216±0.131	CC144	Chang shu wu wi dao	Central China	*I*	missing	missing
CC 70	Su zhou zhan	Central China	*I*	missing	missing	CC145	Da nuo bai dong	Central China	*I*	0.132±0.052	0.199±0.125
CC 71	Yang zhan 3	South China	*I*	0.040±0.012	0.083±0.027	CC146	Lin chuan da ye zao	South China	*I*	0.020±0.017	0.069±0.016
CC 72	Luo ding zhan 1	South China	*I*	missing	missing	CC147	Da bai cao	North China	*I*	0.040±0.044	0.047±0.022
CC 73	Gen yin 29	South China	*I*	0.012±0.018	0.062±0.014	CC148	Chang ning wu qu nan tou zhan	Central China	*I*	0.058±0.019	0.034±0.018
CC 74	Wu ke nuo	South China	*I*	missing	missing	CC149	Pi xian da ye zi	Central China	*I*	0.034±0.013	0.042±0.004
CC 75	Hua bai ke	South China	*I*	missing	missing	CC150	Xi zi zhan	Central China	*I*	missing	missing