BDPS	Co- expression	Anti- expression	Independent expression	Null	Total
BDPs- I	145 (50%)	20 (6.90%)	98 (33.79%)	27 (9.31%)	290
BDPs- II	86(29.25%)	26(8.84%)	83(28.23%)	99 (33.67%)	294
BDPs-III	133(21.21%)	49(7.81%)	188(29.98%)	257 (40.99%)	627
Random	148(14.80%)	121(12.1%)	341(34.10%)	390 (39.00%)	1000

Additional file 10: Table S6

Note: 1000 non-adjacent gene pairs were randomly selected for calculating Pearson correlation coefficient. Gene pairs with Pearson correlation coefficient greater than the average number of all positive values (0.38) were defined as co-expressed ones; gene pairs with Pearson correlation coefficient less than the average number of all negative values (-0.20) were defined as anti-expressed ones; gene pairs with Pearson correlation coefficient between -0.2 and 0.38 were defined as independent ones. Null indicate gene pairs cann't test the Pearson correlation coefficient.