

Table S1: Relation between the ρ^* , configuration size and recall rate in regions with low amounts of LD. Recall rate indicates the percentage of times where we picked the true causal SNP in our configuration. The configuration size is the average number of SNPs which is predicated to be causal by our method. For each value of ρ^* we run the experiment for 1000 times.

ρ^*	Configuration Size	Recall Rate(%)
0.5	1.009862 ± 0.117203	94.67456
0.55	1.04 ± 0.1961554	97.2
0.6	1.066667 ± 0.2572115	96.19048
0.65	1.094412 ± 0.2992068	98.07322
0.7	1.108 ± 0.329474	98.8
0.75	1.136905 ± 0.3498184	99.40476
0.8	1.152642 ± 0.3599944	99.60861
0.85	1.173307 ± 0.3943774	99.8008
0.9	1.177083 ± 0.3981898	99.9
0.95	1.219665 ± 0.4484662	100