**Appendix S1** Bivariate association p values and LD plot against chromosome position around the region of group I SNP.

A span of about 600kb upstream and 600kb downstream were selected out from both Chinese and Caucasian sample. Bivariate p values and LD patterns were plotted against chromosome position. Among all the SNPs, only the three SNPs of group I in Chinese sample showed moderate significant associations, while such association did not show in Caucasian sample. For the LD pattern analysis, the three SNPs of group I formed a block in both population sample, but differences were observed in haplotype phase and frequency (Fig 2).

