

Supplementary table 1. 25 $\mu$ L PCR reaction system

component	volume( $\mu$ L)	concentration
DNA sample	1.00	50-100ng/ $\mu$ L
primer	1.00	50 $\mu$ M/ $\mu$ L
dNTPs	1.00	5mM/ $\mu$ L
Taq DNA polymerase	0.25	5U/ $\mu$ L
10 $\times$ buffer	2.50	
ddH <sub>2</sub> O	18.25	

Supplementary table 2. Conditions applied for PCRs

Primers(Forward/Reverse)	PCR conditions	Size (bp)
F:5'-TAGGAGATAAGGCATAGAAAGC-3'	95 $^{\circ}$ C -5m;(95 $^{\circ}$ C -40s,54 $^{\circ}$ C -40s,	451
R:5'-AGGGGATGCTAAGGTTTTCT-3'	72 $^{\circ}$ C -40s) $\times$ 30;72 $^{\circ}$ C -5m	
F:5'- TGAGGTTTCGAGTCGGCCCCCT-3'	95 $^{\circ}$ C -5m;(95 $^{\circ}$ C -30s,67 $^{\circ}$ C -30s,	250
R:5'- TGCCCAAACATGGCCACACAT-3'	72 $^{\circ}$ C -30s) $\times$ 30;72 $^{\circ}$ C -5m	

F, forward primer; R, reverse primer.

Supplementary table 3. The haplotype frequencies of five SNPs and the distributions between

cases and controls (the frequencies in both groups are more than 3%)

Haplotype	case(freq)	control(freq)	$\chi^2$	$\rho$	OR(95% CI)
A-C-C-A-C	1428(0.17)	1391(0.45)	2.15	0.143	0.08(0.97, 1.20)
A-T-C-G-C	376(0.12)	395(0.13)	0.26	0.610	0.96(0.83, 1.12)
G-C-T-G-T	1098(0.36)	1156(0.37)	1.32	0.250	0.94(0.85, 1.05)