

**Supplementary Table 1.** Gene Nomenclature, LD block and physical location, alleles, minor allele frequencies, and P-values for deviation from Hardy Weinberg equilibrium (HWE).

Gene	LD Block	dbSNP	PGA*	Site	Alleles 1 / 2	Allele 2 Frequency	HWE P-value
<i>ALOX12</i> (1 block)	-	rs9904779	1158	5' of gene	G/C	0.41	0.825
	1	rs2292350	4216	Intron 2	G/A	0.41	0.045
	-	rs2271316	17947	3' of gene	G/C	0.42	0.737
<i>ALOX15</i> (2 blocks)	-	rs11568061	190	5' of gene	C/T	0.19	0.111
	2	rs2515889	9429	Intron 8	G/C	0.12	0.073
	1	rs2619112	11256	Intron 2	C/T**	0.44	0.191
<i>ALOX5</i> (8 blocks)	1	rs745986	-	Intron 2	A/G	0.18	0.031
	2	rs2115819	-	Intron 3	T/C	0.45	1
	3	rs892691	-	Intron 4	G/A	0.29	0.313
	4	rs3780906	-	Intron 6	G/A	0.28	0.085
	7	rs2291427	-	Intron 8	G/A	0.34	0.129
<i>ALOX5AP</i> (5 blocks)	-	rs17222919	660	5' of gene	T/G	0.16	0.7
	1	rs4769055	2161	Intron 1	A/C	0.31	0.223
	2	rs10507391	4431	Intron 1	A/T	0.33	0.338
	3	rs9551960	9276	Intron 1	G/A	0.42	0.007
	4	rs9506352	13151	Intron 2	G/A	0.32	0.465
	5	rs4769060	30231	Intron 4	A/G	0.43	0.915

\* Program in Genomic Application (PGA) identifier (<http://pga.gs.washington.edu/>)

\*\* PGA site polymorphism: C/T; dbSNP and HapMap site polymorphism: A/G