AGPAT3 gene polymorphisms are associated with milk production traits in Chinese Holstein cows

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Table S1. The primers used for SNPs identification of cattle *AGPAT3* gene

Primers	Primer sequences (5′-3′)	Annealing temperature (°C)	Amplicon size (bp)
P1	F: CATCCGTCACTCTCAGGAGGGAAG R: TGGGTCCAGAGGCTCGGGTATG	58	640
P2	F: AAACTCATTTCCAGCAGAAAATCCC R: CTGATGCCCAAGGTAGCACAGC	60	1125
P3	F: ACGTGACCGACGCATCTCTAAC R: AGCTCACCTGACACACATGTCC	60	790
P4	F: CTGAAGTGTCTCCGTGCAATGC R: TAGAGGCAGTCCACGTGCTACC	56	531
P5	F: GTGGTCCATCCACTTTAGGTAGAG R: TTGAGTTAATTGGATACCACCGTC	55	1026

Table S2. Allele and genotype frequency, and Hardy-Weinberg equilibrium test for the SNPs in the *AGPAT3* gene in Chinese Holstein cows

Locus	Allele	Allele frequency	Genotype	Genotype frequency	Observed count	Expected count	χ^2 value of HWE test
g.12264 C>T	C	0.930	CC	0.863	853	853.89	0.187
	T	0.070	CT	0.133	131	129.22	
			TT	0.004	4	4.89	
g.18658 G>A	G	0.360	GG	0.134	132	127.71	0.352
	A	0.640	GA	0.452	445	453.57	
			AA	0.414	407	402.71	
g.18852 C>T	C	0.875	CC	0.806	751	750.42	0.028
	T	0.125	CT	0.174	214	215.16	
			TT	0.020	16	15.42	
g.20046 G>A	G	0.614	GG	0.394	387	369.42	5.603
	A	0.386	AG	0.438	430	465.15	
			AA	0.167	164	146.42	
g.23034 C>A	C	0.496	CC	0.278	262	231.76	15.547**
	A	0.504	CA	0.436	410	470.47	
			AA	0.286	269	238.76	
g.28332 C>T	C	0.389	CC	0.154	149	146.35	0.128
	T	0.611	CT	0.470	454	459.30	
			TT	0.376	363	360.35	
g.28484 C>T	C	0.393	CC	0.161	157	150.21	0.832
	T	0.607	CT	0.463	451	464.58	
			TT	0.376	366	359.21	
g.28731 A>G	A	0.603	AA	0.369	365	359.77	0.483
	G	0.397	AG	0.468	463	473.46	
			GG	0.163	161	155.77	

**$p<0.01$