

Table S1: ADG SNPs included in the final forward selection model. BTA and position denote the chromosome and chromosomal position from the Btau4.0 assembly, respectively. Abs( $\alpha$ ) denotes the absolute value of the allele substitution effect.  $2pq\alpha^2$  describes the genetic variance for each locus where the allele frequencies are p and q=1-p.

Marker ID	BTA	Position (Mb)	Abs( $\alpha$ )	p	$2pq\alpha^2$
<i>ss86298222</i>	1	59.853273	0.0071	0.1060	0.0000095555
<i>ss63968561</i>	1	63.570304	0.0006	0.5007	0.0000001800
<i>ss61531716</i>	1	105.829263	0.0022	0.3696	0.0000022555
<i>ss65172344</i>	1	108.073679	0.0018	0.3746	0.0000015182
<i>ss86290982</i>	2	118.468144	0.0018	0.4513	0.0000016046
<i>ss86298054</i>	2	118.498847	0.0051	0.4778	0.0000129793
<i>ss86320968</i>	2	132.791346	0.0019	0.5315	0.0000017978
<i>rs29015763</i>	3	18.495143	0.0042	0.7049	0.0000073392
<i>ss86318343</i>	3	115.720543	0.0018	0.4420	0.0000015982
<i>ss64165385</i>	4	27.465876	0.0078	0.4699	0.0000303099
<i>ss86333174</i>	4	48.998895	0.0017	0.0709	0.0000003808
<i>ss86293686</i>	4	88.599955	0.0053	0.5287	0.0000139989
<i>ss61469518</i>	5	16.957757	0.0052	0.8539	0.0000067480
<i>ss86335501</i>	5	33.048111	0.0027	0.3474	0.0000033056
<i>ss61469484</i>	6	18.368731	0.019	0.0559	0.0000380870
<i>ss86307817</i>	6	118.120363	0.006	0.6719	0.0000158719
<i>ss117968894</i>	7	26.449891	0.0046	0.7457	0.0000080252
<i>ss65439566</i>	7	62.064599	0.0106	0.8625	0.0000266562
<i>rs29012520</i>	7	65.978304	0.0004	0.9011	0.0000000285
<i>ss86332207</i>	8	48.680422	0.0027	0.7915	0.0000024057
<i>ss86317861</i>	8	51.089227	0.0068	0.5007	0.0000231200
<i>ss86275977</i>	8	115.607565	0.0093	0.5451	0.0000428927
<i>ss86317257</i>	9	12.902431	0.0049	0.7615	0.0000087223
<i>ss86302682</i>	9	47.588815	0.0036	0.1332	0.0000029934
<i>ss86290351</i>	10	15.067096	0.0045	0.3696	0.0000094366
<i>ss86338016</i>	10	16.437278	0.0039	0.4692	0.0000075761
<i>rs29010337</i>	10	68.029461	0.0046	0.5903	0.0000102352
<i>ss61558932</i>	10	87.622309	0.0032	0.2894	0.0000042116
<i>ss86327397</i>	11	12.784299	0.0069	0.1232	0.0000102865
<i>ss86281383</i>	11	88.002621	0.0061	0.7092	0.0000153490
<i>ss61521197</i>	12	24.477221	0.0033	0.2844	0.0000044324
<i>ss86340783</i>	12	30.270048	0.0013	0.4878	0.0000008445
<i>ss86318494</i>	12	73.030843	0.002	0.6168	0.0000018909
<i>ss86307175</i>	13	28.958202	0.0003	0.4083	0.0000000435
<i>ss86339064</i>	13	50.13714	0.0033	0.8309	0.0000030595
<i>ss86325195</i>	13	59.746078	0.0044	0.7027	0.0000080888
<i>ss86311856</i>	14	52.350311	0.0086	0.1920	0.0000229456

<i>ss63983181</i>	16	7.036933	0.0024	0.1433	0.0000014140
<i>ss86329933</i>	16	58.404713	0.0024	0.5974	0.0000027707
<i>ss86298158</i>	17	12.720105	0.0057	0.1433	0.0000079757
<i>ss62643327</i>	17	34.22045	0.0017	0.6705	0.0000012770
<i>ss86303324</i>	17	76.421554	0.0089	0.1497	0.0000201668
<i>ss117972449</i>	18	29.600313	0.0024	0.6662	0.0000025618
<i>ss86303954</i>	18	47.210624	0.0003	0.5387	0.0000000447
<i>ss105259813</i>	19	24.301922	0.0129	0.0938	0.0000283009
<i>ss86283697</i>	19	45.340598	0.0046	0.2063	0.0000069296
<i>ss117965335</i>	19	48.738154	0.0058	0.6139	0.0000159472
<i>ss117965434</i>	19	63.651366	0.0074	0.5967	0.0000263558
<i>ss62617158</i>	20	8.810833	0.0056	0.6261	0.0000146831
<i>ss61543085</i>	20	26.966402	0.0011	0.6311	0.0000005634
<i>ss86336107</i>	21	30.346882	0.0034	0.3259	0.0000050795
<i>ss64618188</i>	21	32.67505	0.0148	0.0723	0.0000294018
<i>ss62727144</i>	21	34.018769	0.0007	0.2407	0.0000001791
<i>ss117965571</i>	23	39.450899	0.0031	0.6032	0.0000046005
<i>rs29018032</i>	23	41.988126	0.0021	0.8632	0.0000010416
<i>ss86289007</i>	24	4.017729	0.0035	0.1332	0.0000028294
<i>ss61547771</i>	24	52.914945	0.0058	0.4914	0.0000168150
<i>ss117973804</i>	25	12.283689	0.003	0.6318	0.0000041873
<i>ss86284393</i>	25	37.212719	0.0032	0.4828	0.0000051139
<i>ss86312150</i>	26	7.796869	0.0064	0.8016	0.0000130295
<i>ss46526045</i>	26	43.529109	0.0037	0.5315	0.0000068178
<i>ss86290736</i>	27	12.383786	0.005	0.8660	0.0000058005
<i>ss61470138</i>	27	19.790331	0.0006	0.3782	0.0000001693
<i>ss86295347</i>	29	48.856592	<0.0000	0.9033	0.0000000000
<i>ss86320739</i>	Un		0.0015	0.5222	0.0000011228
<i>ss117974825</i>	Un		0.0009	0.4291	0.0000003969
<i>ss63781516</i>	Un		0.0044	0.7808	0.0000066269
<i>ss65169323</i>	Un		0.0071	0.5444	0.0000250061

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