

SNPs	Groups	Genotypes	Traits				
			Tyrosinase activity (IU/mL)	SpPM ( $A_{400}$ , OD/mL)	SpASM ( $A_{400}$ , OD/mL)	SpTM ( $A_{500}$ , OD/mL)	SpEM/SpTM ( $A_{650}/A_{500}$ )
c.203C > T	Nanping black-boned (NPBB)	CC	358.55 ± 7.130	0.21 ± 0.006	0.24 ± 0.006	0.96 ± 0.012	0.28 ± 0.005
		CT	383.61 ± 14.919	0.23 ± 0.019	0.25 ± 0.019	1.01 ± 0.046	0.26 ± 0.006
		TT					
		<i>P</i> value	0.285	0.250	0.399	0.228	0.301
	Nanping normal (NPN)	CC	199.09 ± 2.839	0.21 ± 0.005	0.22 ± 0.005	0.49 ± 0.010	0.19 ± 0.014
		CT	194.25 ± 12.924	0.23 ± 0.011	0.25 ± 0.007	0.48 ± 0.034	0.15 ± 0.022
		TT	225.33	0.14	0.15	0.75	0.12
		<i>P</i> value	0.609	0.184	0.079	0.032	0.035
	Romney Marsh (RM)	CC	124.71 ± 2.821	0.19 ± 0.007	0.12 ± 0.005	0.48 ± 0.017	0.10 ± 0.004
		CT	123.67 ± 4.521	0.19 ± 0.011	0.12 ± 0.003	0.48 ± 0.020	0.09 ± 0.006
		TT	120.25 ± 7.684	0.19 ± 0.013	0.11 ± 0.006	0.42 ± 0.029	0.11 ± 0.008
		<i>P</i> value	0.869	0.974	0.531	0.399	0.374
	All sheep	CC	245.84 ± 6.760 <sup>a</sup>	0.20 ± 0.003	0.21 ± 0.004 <sup>a</sup>	0.66 ± 0.017 <sup>a</sup>	0.20 ± 0.005 <sup>a</sup>
		CT	187.78 ± 16.959 <sup>b</sup>	0.20 ± 0.008	0.16 ± 0.011 <sup>b</sup>	0.59 ± 0.037 <sup>a,b</sup>	0.14 ± 0.012 <sup>b</sup>
		TT	133.39 ± 14.725 <sup>b</sup>	0.18 ± 0.015	0.11 ± 0.009 <sup>b</sup>	0.46 ± 0.049 <sup>b</sup>	0.11 ± 0.007 <sup>b</sup>
		<i>P</i> value	0.000	0.586	0.000	0.026	0.000
c.1202T > C	Nanping black-boned (NPBB)	TT	354.56 ± 8.889	0.22 ± 0.056	0.25 ± 0.008	0.95 ± 0.014	0.28 ± 0.007
		TC	369.51 ± 12.912	0.19 ± 0.009	0.22 ± 0.009	0.96 ± 0.027	0.28 ± 0.006
		CC	371.67 ± 26.010	0.18 ± 0.020	0.21 ± 0.009	1.07 ± 0.043	0.26 ± 0.006
		<i>P</i> value	0.573	0.051	0.041	0.098	0.750
	Nanping normal (NPN)	TT	203.59 ± 3.230	0.20 ± 0.007	0.21 ± 0.006	0.49 ± 0.014	0.18 ± 0.005
		TC	191.26 ± 5.492	0.21 ± 0.007	0.23 ± 0.007	0.50 ± 0.036	0.17 ± 0.005
		CC	198.32 ± 7.212	0.22 ± 0.015	0.22 ± 0.013	0.45 ± 0.036	0.18 ± 0.014
		<i>P</i> value	0.117	0.248	0.290	0.561	0.747
	Romney Marsh (RM)	TT	122.85 ± 2.933	0.18 ± 0.005	0.11 ± 0.003	0.48 ± 0.014	0.10 ± 0.004
		TC	123.31 ± 4.532	0.20 ± 0.010	0.12 ± 0.004	0.45 ± 0.027	0.10 ± 0.008
		CC	138.96 ± 9.288	0.17 ± 0.012	0.11 ± 0.010	0.49 ± 0.064	0.10 ± 0.012
		<i>P</i> value	0.298	0.190	0.145	0.522	0.658
	All sheep	TT	230.95 ± 8.240	0.20 ± 0.006	0.20 ± 0.006	0.64 ± 0.019	0.19 ± 0.007
		TC	232.40 ± 11.482	0.20 ± 0.005	0.20 ± 0.006	0.63 ± 0.027	0.19 ± 0.008
		CC	239.43 ± 25.054	0.19 ± 0.010	0.19 ± 0.014	0.65 ± 0.073	0.18 ± 0.017
		<i>P</i> value	0.950	0.801	0.799	0.946	0.954

<sup>a,b,c</sup> Values in the same column indicate that either the three populations or all sheep with different superscripts differ ( $p < 0.05$ ).