

SUPPLEMENTARY MATERIALS

to the article by A.V. Igoshin, T.M. Mishakova, R.B. Aitnazarov, A.V. Ilina, D.M. Larkin, N.S. Yudin
 "Association of three single nucleotide polymorphisms in the *LPIN1* gene with milk production traits in cows of the Yaroslavl breed"

Supplementary Material 1. Primers, reaction conditions, and restriction endonucleases for genotyped SNPs

SNP ID	Forward/Reverse Primer	PCR conditions (denaturation, annealing, elongation)	Product length, b.p.	Restriction endonuclease	Restriction recognition site *	Lengths after restriction, b.p.
rs110871255	F: ATGTTCTCGTCCCTTTTCAG R: ATGTTTGCTGCCCTTCAGG	95 °C – 1 min 66 °C – 1 min 72 °C – 15 s 35 cycles	248	Fat I	TGCCAGGTG <u>↑</u> CATGGGGATCAC	215\33
rs207681322	F: TGCACAGGAAGGCACTGGGA R: GCAGAACAAGCCGAGACA	95 °C – 1 min 60 °C – 1 min 72 °C – 15 s 35 cycles	201	Asp9 I	GGTAAAGGGG <u>↑</u> GGCCGCTGCT	131\70
rs109039955	F: ATCTGATTTTCAAAGCCAC R: TGGGAGGAATTGGCCTTG	95 °C – 1 min 66 °C – 1 min 72 °C – 15 s 35 cycles	242	Rsa I	GAAGCTTAGGG <u>↑</u> TACACCAA	146\96

* The nucleotide corresponding to the SNP is underlined.

Supplementary Material 2. Cumulative milk production curves

Y-axis values are calculated from monthly performance data of animals with lactation duration > 305 days. The curve equations are obtained based on second-degree polynomial approximation using the "lm" function of the R language.

