**Supplementaty information**

S1. Number of outliers, minimum, maximum, mean, and standard deviation of the proportions of type I, type IIA and type IIX myofibers in Holstein cows, as estimated using four deconvolution methods (CIBERSORTx, Cellanneal, DeconvR-NNLS, and DeconvR-RLM), with Brahman and Wagyu as reference breeds. The table also includes values obtained from direct biopsies of the *Longissimus dorsi* muscle taken in the same cows.

| Myofiber | Methodology | Reference Breed | Outliers | Min (%) | Max (%) | Mean (%) | SD (%) |
|---|---|---|---|---|---|---|---|
| Type I | Biopsy | Holstein | 0 | 13.98 | 38.98 | 23.09 | 5.61 |
| | Cellanneal | Brahman | 0 | 38.64 | 72.14 | 55.14 | 9.38 |
| | | Wagyu | 0 | 31.49 | 39.05 | 36.01 | 1.99 |
| | CIBERSORTx | Brahman | 1 | 12.60 | 24.85 | 18.67 | 3.48 |
| | | Wagyu | 2 | 10.99 | 21.26 | 16.09 | 2.91 |
| | DeconvR – NNLS | Brahman | 0 | 29.89 | 47.12 | 37.41 | 3.61 |
| | | Wagyu | 0 | 24.92 | 40.59 | 29.21 | 3.24 |
| | DeconvR – RLM | Brahman | 1 | 11.35 | 26.04 | 17.39 | 3.59 |
| | | Wagyu | 1 | 10.38 | 22.96 | 15.36 | 3.07 |
| Type IIA | Biopsy | Holstein | 0 | 26.88 | 69.40 | 40.73 | 9.20 |
| | Cellanneal | Brahman | 0 | 1.46 | 34.89 | 15.89 | 10.19 |
| | | Wagyu | 0 | 34.44 | 44.38 | 38.83 | 2.11 |
| | CIBERSORTx | Brahman | 1 | 36.20 | 47.50 | 42.41 | 3.22 |
| | | Wagyu | 2 | 56.76 | 68.15 | 62.40 | 2.94 |
| | DeconvR – NNLS | Brahman | 0 | 0.00 | 48.12 | 19.10 | 13.83 |
| | | Wagyu | 0 | 38.59 | 72.26 | 61.43 | 8.39 |
| | DeconvR – RLM | Brahman | 1 | 33.72 | 50.02 | 43.64 | 4.28 |
| | | Wagyu | 1 | 58.29 | 70.59 | 64.66 | 3.27 |
| Type IIX | Biopsy | Holstein | 0 | 9.33 | 59.14 | 36.17 | 9.98 |
| | Cellanneal | Brahman | 0 | 23.91 | 36.67 | 28.97 | 3.23 |
| | | Wagyu | 0 | 21.39 | 31.33 | 25.15 | 2.66 |
| | CIBERSORTx | Brahman | 1 | 32.25 | 43.10 | 38.93 | 2.46 |
| | | Wagyu | 2 | 17.59 | 26.13 | 21.51 | 1.72 |
| | DeconvR – NNLS | Brahman | 0 | 21.99 | 64.55 | 43.49 | 12.82 |
| | | Wagyu | 0 | 0.00 | 33.42 | 9.36 | 9.24 |
| | DeconvR – RLM | Brahman | 1 | 32.71 | 45.41 | 38.97 | 3.42 |
| | | Wagyu | 1 | 15.90 | 27.25 | 19.97 | 2.55 |

Min: Minimum; Max: Maximum; SD: Standard Deviation; NNLS: Non-Negative Least Square; RLM: Robust Linear Model; n: number of cows with results after removing outliers. Different letters indicate statistically significant differences between groups, as determined by the Dunn's test with Bonferroni correction ($p<0.00139$).