**Supplementary Data 1.** Statistics of the completeness of the assemblies from Soapdenovo2 and Masurca of the Peruvian creole cattle genome.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Assembly | Soapdenovo2(45-mer) | Soapdenovo2(63-mer) | Soapdenovo2(103-mer) | MaSuRcA |
| # contigs (>= 0 bp) | 6634306 | 6898173 | 6985620 | 381008 |
| # contigs (>= 1000 bp) | 441562 | 398006 | 386459 | 307114 |
| # contigs (>= 5000 bp) | 514 | 359 | 309 | 179627 |
| # contigs (>= 10000 bp) | 1 | 1 | 1 | 92431 |
| # contigs (>= 25000 bp) | 0 | 0 | 0 | 14279 |
| # contigs (>= 50000 bp) | 0 | 0 | 0 | 726 |
| Total length (>= 0 bp) | 2147101603 | 2129104067 | 2127383428 | 2690713641 |
| Total length (>= 1000 bp) | 673935091 | 593728368 | 572703049 | 2649741920 |
| Total length (>= 5000 bp) | 2911294 | 2030442 | 1744585 | 2292013114 |
| Total length (>= 10000 bp) | 10086 | 10086 | 10086 | 1663134829 |
| Total length (>= 25000 bp) | 0 | 0 | 0 | 476650630 |
| Total length (>= 50000 bp) | 0 | 0 | 0 | 42749256 |
| # contigs | 1242573 | 1214400 | 1206751 | 348975 |
| Largest contig | 10086 | 10086 | 10086 | 109017 |
| Total length | 1237372441 | 1165473687 | 1146410109 | 2679899159 |
| GC (%) | 41.58 | 41.69 | 41.71 | 41.92 |
| N50 | 1065 | 1012 | 999 | 12843 |
| N75 | 747 | 723 | 716 | 7242 |
| L50 | 387989 | 387079 | 386962 | 63921 |
| L75 | 736397 | 729288 | 727367 | 133082 |
| # N's per 100 kbp | 462.93 | 37.62 | 0 | 11.26 |