

Supplementary Table S1: Evaluation statistics of sequencing data of 15 milk samples.

| Group | Sample ID | Raw data base(bp) | Clean data base(bp) | Number of Reads | GC(%) | Q20(%) | Q30(%) |
|-------|-----------|-------------------|---------------------|-----------------|--------|--------|--------|
| MM | A1 | 7,841,790,600 | 98574324 | 660492 | 50.05% | 93.02% | 83.41% |
| MM | A2 | 7,109,118,600 | 542813348 | 3629456 | 48.30% | 92.52% | 80.15% |
| MM | A3 | 8,988,979,200 | 128440314 | 860238 | 49.38% | 95.15% | 87.40% |
| MM | A4 | 7,484,541,000 | 171674982 | 1148372 | 54.74% | 96.33% | 90.01% |
| MM | A5 | 8,563,971,600 | 173874032 | 1163550 | 50.82% | 95.95% | 89.13% |
| MM | A6 | 8,723,709,000 | 143371996 | 958724 | 50.91% | 95.59% | 88.11% |
| HM | B1 | 8,735,325,300 | 168758752 | 1129444 | 47.21% | 96.14% | 89.60% |
| HM | B2 | 10,050,748,500 | 703922664 | 4716314 | 54.92% | 97.43% | 92.28% |
| HM | B3 | 11,667,046,500 | 2092493338 | 14030032 | 55.64% | 97.70% | 92.94% |
| HM | B4 | 9,848,993,700 | 491072442 | 3291490 | 53.55% | 97.36% | 92.29% |
| HM | BN1 | 6,777,971,700 | 822588234 | 5495018 | 49.77% | 94.34% | 82.97% |
| HM | BN2 | 5,950,117,500 | 172629302 | 1158114 | 49.55% | 90.82% | 76.89% |
| HM | BN3 | 17,230,175,100 | 773192188 | 5182048 | 45.42% | 94.97% | 86.06% |
| HM | BN4 | 5,607,660,000 | 364757178 | 2439652 | 48.22% | 93.29% | 81.27% |
| HM | BN5 | 15,677,921,400 | 777190740 | 5192886 | 51.46% | 95.96% | 87.83% |
| Total | | 140,258,069,700 | 7,625,353,834 | 51,055,830 | | | |
| AVER | | 9,350,537,980 | 508,356,922 | 3,403,722 | | | |

Note: Q20(%): Percentage of the base with a mass value greater than or equal to 20 in total base; Q30(%):

Percentage of the base with a mass value greater than or equal to 30 in entire base; GC(%): GC content of a sample, namely the percentage of G and C type bases in total bases.