| Sample | Group | Raw Reads ^a | Cleaned Reads ^b | Decontam Reads ^c | Classified Reads ^d | Avg Read Len ^e | Uniquely Mapped Reads ^f | Uniquely Mapped Reads (%) ⁹ | Avg Mapped Len ^h | Multi Mapped Reads ⁱ | Too Many Mapped Reads ^j |
|------------|-------------|------------------------|-------------------------------|-----------------------------|----------------------------------|------------------------------|---------------------------------------|--|-----------------------------------|---------------------------------------|--|
| SUBJECT12A | Breast-fed | 12657133 | 12351034 | 12339489 | 7270725 | 203 | 9219198 | 74.71% | 201.85 | 118862 | 120 |
| SUBJECT12B | Breast-fed | 12936604 | 12630335 | 12622859 | 7777684 | 208 | 9408386 | 74.53% | 206.72 | 109466 | 93 |
| SUBJECT13A | Breast-fed | 11975209 | 11679060 | 11664826 | 7382648 | 204 | 9034835 | 77.45% | 202.97 | 101319 | 64 |
| SUBJECT13B | Breast-fed | 13066054 | 12768140 | 12758643 | 7692273 | 208 | 10075514 | 78.97% | 207.03 | 102455 | 60 |
| SUBJECT14A | Breast-fed | 15053426 | 14745011 | 14735687 | 11918114 | 211 | 11174734 | 75.83% | 209.87 | 94207 | 190 |
| SUBJECT14B | Breast-fed | 13822355 | 13532828 | 13522147 | 10763117 | 211 | 10407265 | 76.96% | 209.97 | 88903 | 173 |
| SUBJECT15A | Breast-fed | 11789722 | 11501043 | 11437870 | 8234878 | 199 | 9463599 | 82.74% | 198.28 | 92730 | 160 |
| SUBJECT15B | Breast-fed | 12979568 | 12665711 | 12625070 | 9225786 | 203 | 10513543 | 83.28% | 202.17 | 95107 | 164 |
| SUBJECT17A | Breast-fed | 11380343 | 11114475 | 11025775 | 9547213 | 208 | 6820861 | 61.86% | 205.03 | 141756 | 242 |
| SUBJECT17B | Breast-fed | 14655796 | 14279589 | 13098785 | 10927614 | 210 | 7963423 | 60.80% | 207.25 | 149252 | 267 |
| SUBJECT18A | Breast-fed | 13705186 | 13331276 | 12821732 | 9801896 | 207 | 10162009 | 79.26% | 207 | 65543 | 156 |
| SUBJECT18B | Breast-fed | 11990896 | 11666233 | 11341767 | 8698848 | 210 | 8992209 | 79.28% | 209.74 | 55137 | 121 |
| SUBJECT1A | Breast-fed | 13365572 | 13018552 | 12998305 | 10551311 | 196 | 9755913 | 75.06% | 194.54 | 91337 | 300 |
| SUBJECT1B | Breast-fed | 12781762 | 12467526 | 12456890 | 10225857 | 203 | 8820735 | 70.81% | 200.81 | 81438 | 287 |
| SUBJECT5A | Breast-fed | 13281471 | 12983934 | 12963442 | 9141529 | 203 | 9673165 | 74.62% | 202.05 | 146408 | 237 |
| SUBJECT5B | Breast-fed | 12645142 | 12369779 | 12360002 | 8394481 | 210 | 9181845 | 74.29% | 208.53 | 117330 | 145 |
| SUBJECT7A | Breast-fed | 11398789 | 10973328 | 8896563 | 8339483 | 206 | 5549725 | 62.38% | 203.21 | 79032 | 8 |
| SUBJECT7B | Breast-fed | 11720701 | 11366003 | 10614338 | 10016505 | 213 | 6582560 | 62.02% | 210.38 | 83728 | 14 |
| SUBJECT9A | Breast-fed | 11204847 | 10914410 | 10628553 | 9301773 | 213 | 6455188 | 60.73% | 209.74 | 114943 | 127 |
| SUBJECT9B | Breast-fed | 11478766 | 11148240 | 10496969 | 9075236 | 213 | 6371452 | 60.70% | 209.31 | 108837 | 113 |
| SUBJECT10A | Formula-fed | 11788309 | 11538713 | 11530193 | 9661213 | 207 | 8606080 | 74.64% | 206.21 | 50419 | 298 |
| SUBJECT10B | Formula-fed | 11473609 | 11230372 | 11218399 | 9817550 | 212 | 8330119 | 74.25% | 210.13 | 44372 | 207 |
| SUBJECT16A | Formula-fed | 12824459 | 12502271 | 12492961 | 11290652 | 205 | 7544713 | 60.39% | 201.46 | 165614 | 230 |
| SUBJECT16B | Formula-fed | 12829805 | 12523603 | 12518269 | 11563018 | 210 | 7720225 | 61.67% | 206.6 | 157036 | 221 |
| SUBJECT2A | Formula-fed | 12127916 | 11740300 | 11723314 | 8532270 | 201 | 7540092 | 64.32% | 198.45 | 90829 | 380 |
| SUBJECT2B | Formula-fed | 11651159 | 11300971 | 11289641 | 8286360 | 206 | 7449144 | 65.98% | 203.89 | 81076 | 166 |
| SUBJECT3A | Formula-fed | 11060062 | 10807117 | 10797847 | 2835985 | 204 | 8895746 | 82.38% | 202.46 | 51802 | 152 |
| SUBJECT3B | Formula-fed | 16470871 | 16051157 | 16026213 | 4966310 | 199 | 12754901 | 79.59% | 197.94 | 83927 | 198 |
| SUBJECT4A | Formula-fed | 10931262 | 10650957 | 10639707 | 9162589 | 203 | 7050997 | 66.27% | 201.08 | 89438 | 223 |
| SUBJECT4B | Formula-fed | 11852743 | 11541081 | 11520917 | 9021218 | 204 | 7895885 | 68.54% | 201.95 | 102816 | 195 |

Supplementary Table 1. (a) Number of raw reads after sequencing. (b) Number of reads after adapter trimming. (c) Number of reads after human and PhiX decontamination. (d) Number of reads classified by Kraken1. (e) Average read length. (f) Number of reads which mapped to one unique location in the metagenome. (g) Percentage of reads which mapped to one unique location in the metagenome. (h) Average mapped read length. (i) Number of reads that mapped to multiple locations in the metagenome. (j) Number of reads that were discarded due to being mapped to more than 20 location in the metagenome. The means of all columns shown in this table were compared between Breast-fed and Formula-fed groups using a Welch's t-test with a significance level of 0.01; no statistically significant

differences were found.