**Supplementary Table S1: Mapping results of high-throughput sequencing reads to *I. persulcatus* reference mitogenome sequence.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Name | Mitogenome length (bp) | Total number of reads | Number of reads mapped to mitogenome | Percent of mapped reads | Mean length of mapped reads (bp) | Mapped nucleotides | Sequencing depth |
| CRR142238 | 14,547 | 17,196,290 | 14,166 | 0.000824 | 238 | 3,372,925 | 232 |
| CRR142239 | 14,546 | 11,706,629 | 17,493 | 0.001494 | 247 | 4,326,019 | 297 |
| CRR142240 | 14,550 | 49,851,142 | 5,963 | 0.000120 | 166 | 987,473 | 68 |
| CRR142241 | 14,548 | 11,327,745 | 11,605 | 0.001024 | 244 | 2,826,978 | 194 |
| CRR142242 | 14,547 | 15,460,879 | 15,958 | 0.001032 | 242 | 3,868,219 | 266 |
| CRR142243 | 14,547 | 18,353,992 | 14,486 | 0.000789 | 245 | 3,554,864 | 244 |
| CRR142244 | 14,547 | 18,253,460 | 18,699 | 0.001024 | 246 | 4,590,605 | 316 |
| CRR142245 | 14,548 | 19,610,283 | 23,903 | 0.001219 | 243 | 5,810,819 | 399 |
| CRR142246 | 14,547 | 45,109,162 | 49,920 | 0.001107 | 239 | 11,920,896 | 819 |
| CRR142247 | 14,545 | 14,326,620 | 12,167 | 0.000849 | 246 | 2,990,649 | 206 |
| CRR142248 | 14,551 | 15,305,784 | 12,865 | 0.000841 | 249 | 3,196,953 | 220 |
| CRR142249 | 14,548 | 18,102,150 | 14,027 | 0.000775 | 246 | 3,453,447 | 237 |
| CRR142250 | 14,545 | 16,595,555 | 9,630 | 0.000580 | 243 | 2,342,016 | 161 |
| CRR142251 | 14,545 | 14,515,598 | 9,760 | 0.000672 | 247 | 2,406,816 | 165 |
| CRR142252 | 14,543 | 15,409,691 | 11,914 | 0.000773 | 248 | 2,955,863 | 203 |
| CRR142253 | 14,546 | 15,201,576 | 11,826 | 0.000778 | 248 | 2,932,848 | 202 |
| CRR142254 | 14,551 | 14,911,386 | 12,894 | 0.000865 | 250 | 3,227,368 | 222 |
| CRR142255 | 14,548 | 25,710,353 | 2,715 | 0.000106 | 246 | 668,705 | 46 |
| CRR142256 | 14,545 | 31,010,315 | 2,239 | 0.000072 | 246 | 549,675 | 38 |
| CRR142257 | 14,546 | 36,034,692 | 2,528 | 0.000070 | 244 | 616,074 | 42 |
| CRR142258 | 14,546 | 35,985,158 | 1,786 | 0.000050 | 246 | 438,642 | 30 |
| CRR142259 | 14,547 | 33,790,477 | 1,571 | 0.000046 | 242 | 380,025 | 26 |
| CRR142260 | 14,543 | 25,827,698 | 5,435 | 0.000210 | 252 | 1,371,251 | 94 |
| CRR142261 | 14,546 | 24,264,496 | 1,941 | 0.000080 | 251 | 487,191 | 33 |
| CRR142262 | 14,546 | 34,912,727 | 113,625 | 0.003255 | 244 | 27,713,138 | 1905 |
| CRR142263 | 14,543 | 30,401,198 | 138,833 | 0.004567 | 246 | 34,097,385 | 2345 |
| CRR142264 | 14,547 | 21,463,495 | 66,078 | 0.003079 | 250 | 16,519,500 | 1136 |
| CRR142265 | 14,546 | 27,619,491 | 80,595 | 0.002918 | 245 | 19,713,537 | 1355 |
| CRR142266 | 14,547 | 32,004,844 | 65,052 | 0.002033 | 245 | 15,957,256 | 1097 |
| CRR142267 | 14,546 | 16,854,452 | 46,569 | 0.002763 | 247 | 11,483,915 | 789 |
| CRR142268 | 14,547 | 33,292,036 | 82,344 | 0.002473 | 246 | 20,264,858 | 1393 |
| CRR142269 | 14,547 | 25,068,314 | 48,875 | 0.001950 | 252 | 12,316,500 | 847 |
| CRR142270 | 14,544 | 9,755,468 | 16,257 | 0.001666 | 250 | 4,057,747 | 279 |
| CRR142271 | 14,543 | 16,405,015 | 25,107 | 0.001530 | 245 | 6,138,662 | 422 |
| CRR142272 | 14,546 | 30,939,830 | 5,803 | 0.000188 | 247 | 1,433,921 | 99 |
| CRR142273 | 14,547 | 22,490,955 | 34,006 | 0.001512 | 250 | 8,501,500 | 584 |
| CRR142274 | 14,544 | 19,426,726 | 21,101 | 0.001086 | 252 | 5,306,902 | 365 |
| CRR142275 | 14,545 | 23,773,465 | 33,934 | 0.001427 | 250 | 8,490,287 | 584 |
| CRR142276 | 14,547 | 21,489,558 | 20,169 | 0.000939 | 251 | 5,062,419 | 348 |
| CRR142277 | 14,546 | 24,453,629 | 28,718 | 0.001174 | 252 | 7,222,577 | 497 |
| CRR142278 | 14,546 | 140,655,074 | 176,780 | 0.001257 | 150 | 26,517,000 | 1823 |
| CRR142279 | 14,544 | 147,465,185 | 194,603 | 0.001320 | 150 | 29,190,450 | 2007 |
| CRR142280 | 14,547 | 21,573,221 | 33,720 | 0.001563 | 251 | 8,477,208 | 583 |
| CRR142281 | 14,548 | 1,092,359 | 1,522 | 0.001393 | 252 | 384,001 | 26 |
| CRR142282 | 14,545 | 20,624,837 | 21,705 | 0.001052 | 250 | 5,432,762 | 374 |
| CRR142283 | 14,547 | 21,777,855 | 25,521 | 0.001172 | 251 | 6,393,011 | 439 |
| CRR142284 | 14,547 | 18,688,444 | 24,018 | 0.001285 | 251 | 6,038,125 | 415 |
| CRR142285 | 14,544 | 24,338,472 | 14,539 | 0.000597 | 248 | 3,605,672 | 248 |
| CRR142286 | 14,544 | 27,485,605 | 11,502 | 0.000418 | 250 | 2,876,650 | 198 |
| CRR142287 | 14,545 | 20,579,700 | 15,069 | 0.000732 | 250 | 3,770,264 | 259 |
| CRR142288 | 14,545 | 21,487,937 | 15,029 | 0.000699 | 250 | 3,749,736 | 258 |
| CRR142289 | 14,543 | 160,707,036 | 108,034 | 0.000672 | 150 | 16,205,100 | 1114 |
| CRR142290 | 14,546 | 860,432 | 623 | 0.000724 | 250 | 155,999 | 11 |
| CRR142291 | 14,547 | 25,840,003 | 21,453 | 0.000830 | 250 | 5,363,250 | 369 |
| CRR142292 | 14,545 | 35,828,748 | 3,385 | 0.000094 | 247 | 836,434 | 58 |
| CRR142293 | 14,547 | 22,302,813 | 896 | 0.000040 | 246 | 220,147 | 15 |
| CRR142294 | 14,548 | 34,244,550 | 3,145 | 0.000092 | 248 | 780,275 | 54 |
| CRR142295 | 14,547 | 22,922,811 | 905 | 0.000039 | 245 | 221,635 | 15 |
| CRR142296 | 14,548 | 21,696,376 | 23,655 | 0.001090 | 249 | 5,890,095 | 405 |
| CRR142297 | 14,544 | 34,603,590 | 62,432 | 0.001804 | 248 | 15,458,163 | 1063 |
| CRR142298 | 14,545 | 24,143,280 | 32,067 | 0.001328 | 244 | 7,827,555 | 538 |
| CRR142299 | 14,545 | 20,916,043 | 20,246 | 0.000968 | 249 | 5,043,279 | 347 |
| CRR142300 | 14,546 | 11,569,967 | 12,688 | 0.001097 | 246 | 3,121,248 | 215 |
| CRR142301 | 14,545 | 17,345,132 | 25,849 | 0.001490 | 248 | 6,420,892 | 441 |
| CRR142302 | 14,548 | 17,953,456 | 13,859 | 0.000772 | 253 | 3,506,327 | 241 |
| CRR142303 | 14,546 | 18,730,573 | 32,588 | 0.001740 | 247 | 8,052,495 | 554 |
| CRR142304 | 14,547 | 23,850,745 | 28,777 | 0.001207 | 250 | 7,191,372 | 494 |
| CRR142305 | 14,548 | 26,780,353 | 34,192 | 0.001277 | 249 | 8,510,389 | 585 |
| CRR142306 | 14,545 | 25,836,738 | 42,583 | 0.001648 | 250 | 10,645,750 | 732 |
| CRR142307 | 14,545 | 27,929,848 | 23,302 | 0.000834 | 249 | 5,802,198 | 399 |
| CRR142308 | 14,544 | 25,235,469 | 16,160 | 0.000640 | 250 | 4,040,000 | 278 |
| CRR142309 | 14,546 | 20,787,022 | 25,671 | 0.001235 | 252 | 6,469,092 | 445 |
| CRR142310 | 14,567 | 23,000,367 | 22,615 | 0.000983 | 248 | 5,608,520 | 385 |
| CRR142311 | 14,571 | 30,978,492 | 29,662 | 0.000958 | 249 | 7,388,804 | 507 |