Supplemental Table S2 — Summary of GC content in chloroplast, mitochondrial and nuclear genomes of a representative sample of Sacchainae

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Splice Sites** |  |  |  |  |
|  |  |  |  |  |  |
| **Start** | **End** | **Strand** | **Gene 1** | **Gene2** | **Notes** |
| **MT1** |  |  |  |  |  |
| 1104 | 98718 | plus | mttB | atp8 | Second splice junction is in the middle of ccmC |
| 7046 | MT2:8786 | plus | mttB | ccmFc | first splice lies in atp1; Second splice junction lies within rrn26 |
| 8267 | 80310 | minus | mttB | trmL | Second splice junction lies in a nad7 exon may splice with putative protein OQU77742 |
| 8600 | 40833 | minus | mttB | nad7 | First splice site in atp1, second splice iste in rps2 (end) |
| 8600 | 99084 | minus | mttB | atp8 | Second splice site in rrn26 |
| 33911 | 60869 | plus | trnY | nad7 ex2/trnS |
| 36771 | 61377 | minus | trnY | nad7 ex2/trnS | second splice junction in middle or rrn18 |
| 37053 | 101043 | minus | trnY | atp8 | second splice juncion lies within rrn26 |
| 38863 | 109527 | plus | trnY | rrn5/cox1 | Second splice junction lies within rrn26 |
| 45823 | 63316 | minus | rps2 | trnS |  |
| 45823 | 98028 | minus | rps2 | atp8 | Second splice junction lies within rrn26 |
| 54613 | 110493 | minus | rps2 | rrn5/cox1 | Second splice junction lies within rrn26 |
| 54613 | 60420 | plus | rps2 | nad7 exons 1 and 2/ trnS | Second splice site lies within nad7 exon3 |
| 57286 | 59090 | plus | rps2 | nad 7 exons 1,2,3 | First splice site lies within nad7 exon5, second splice lies in nad7 exon 4 |
| 57216 | 164873 | minus | rps2 | trnP | First splice site lies within nad7 exon5, second splice lies in nad1 exon |
| 57348 | 59159 | plus | rps2 | nad7 exons 1,2,3 | First splice site lies within nad7 exon5, second splice lies in nad7 exon 4 |
| 59231 | 60394 | plus | nad7 exon 5,rps2 | nad7-exon3 | First splice site lies within nad7-exon4, second splice site lies within nad7 exon3 |
| 60629 | 62177 | minus | nad7 exon 4,5 | nad7-exon1 | First splice site lies within nad7-exon 3 |
| 61355 | 98434 | plus | nad7 exons 3,4,5 | atp8 | Second splice site in rrn18 |
| 62030 | 109496 | plus | nad7 exons 3,4,5 | rrn5/cox1 | Second splice junction lies within rrn26 |
| 73158 | 82585 | minus | rps7 | rrn18 |  |
| 73158 | 120822 | minus | rps7 | cox2 |  |
| 73158 | 123280 | minus | rps7 | trnI/transposon-derived Pol |
| 73158 | 157262 | minus | rps7 | nad6 |  |
| 73158 | 163958 | minus | rps7 | nad1 internal/trnP |
| 81050 | 177766 | plus | ccmC | nad2 |  |
| 92752 | 100956 | plus | ccmC | atp8 | second splice in rrn18 |
| 97213 | 113571 | plus | ccmC | cox2 |  |
| 97213 | 123287 | minus | ccmC | trnI |  |
| 97213 | 131450 | minus | ccmC | trnH |  |
| 97213 | 159437 | minus | ccmC | nad1 interna exon/trnP | second splice in nad6 |
| 98250 | 285335 | plus | ccmC | rrn18/atp8 | first splice in rrn18, second splice in rrn18 |
| 98676 | 286736 | plus | ccmC | rrn18/atp8 | first splice in rrn18, second splice in rrn18 |
| 98776 | 286551 | minus | ccmC | rrn18/atp8 | first splice in rrn18, second splice in rrn18 |
| 99212 | 286859 | plus | ccmC | rrn18/atp8 | first splice in rrn18, second splice in rrn18 |
| 99310 | 261289 | plus | ccmC | rrn18/atp8 | first splice in rrn18, second splice in rrn18 |
| 100380 | 288506 | minus | ccmC | rrn18/atp8 | first splice in rrn18, second splice in rrn18 |
| 102125 | 112393 | plus | rrn18 | cox2 | first splice in atp8, second splice in cox1 |
| 110406 | 220357 | minus | atp8 | trnK | first splice in rrn28, |
| 110652 | 296822 | minus | atp8 | rrn26, rrn5 | first splice in rrn28, second splice in rrn26 |
| 111144 | 298842 | minus | rrn26 | rrn5, cox1 pseudo | first splice in rrn5, second splice in rrn5 |
| 113091 | 300696 | plus | cox1 | nad5 (if spliced to mt2) or end of cox1 pseudogene |
| 113455 | 190188 | plus | cox1 | nad2 |  |
| 113462 | MT2:49855 | plus | cox1 | rps12 |  |
| 121227 | 122595 | plus | cox2 exon1 | cox2 exon2 | second splice within cox2 exon2 but product translates into a truncated cox II |
| 122828 | 286711 | minus | cox2 exon1 | atp8 | first intron within cox 2 exon2, second exon within rrn18 |
| 132061 | 132849 | minus | trnI | trnH |  |
| 133416 | MT2:50053 | plus | trnH | rps12 |  |
| 137290 | 164839 | minus | ccmB | trnP | second splice within exon of nad1 |
| 148224 | 149756 | minus | trnP | rps13 | first splice within exon of nad1, second splice within exon of nad1 |
| 149730 | 164836 | plus | trnP | trnP, nad1 | first splice within exon of nad1, second splice within exon of nad1 |
| 149764 | 164670 | plus | trnP | trnP, nad1 | first splice within exon of nad1, second splice within exon of nad1 |
| 149765 | 168871 | plus | trnP | nad2 | first splice within exon of nad1, |
| 152961 | 181473 | plus | rps13 | nad2 |  |
| 156010 | 208774 | minus | rps13 | nad5 | first splice within nad4 |
| 159327 | MT2:26275 | minus | atp4 | trnM | first splice within nad6 |
| 190228 | 240235 | plus | trnP | matR | second splice in last exon of nad1 |
| 190260 | 266329 | minus | trnP | trnS |  |
| 190316 | MT2:107755 | plus | trnP | cob |  |
| 190334 | MT2:107822 | minus | trnP | cob |  |
| 190410 | 286763 | minus | trnP | atp8 | second splice in rrn28 |
| 191530 | 192476 | minus | trnP |  | first splice in nad2 exon1 |
| 192363 | MT2:49741 | plus | trnP, nad2 exon1 | first splice in nad2 exon2 |
| 208541 | 209534 | minus | nad2 exon1 and 2 | trnK | first splice in nad5 exon1, second splice in nad5 exon1 |
| 213190 | 221562 | minus | nad5 exons 1 and 2 | trnK | second splice site in nad2 exon2 |
| 227905 | MT2:27085 | minus | nad5 exons 1 and 2 | trnM |  |
| 228357 | 287403 | minus | nad5 exons 1 and 2 | atp8 | second splice in rrn28 |
| 228406 | 298127 | minus | nad5 exons 1 and 2 | atp8 | second splice in rrn28 |
| 228406 | 246601 | minus | nad5 exons 1 and 2 | ccmFn | second splice in rps1 |
| 228357 | 286902 | minus | nad5 exons 1 and 2 | atp8 | second splice in rrn28 |
| 228357 | 299492 | minus | nad5 exons 1 and 2 | nad5 (if spliced to mt2) or end of cox1 pseudogene |
| 229690 | 286916 | minus | nad5 exons 1 and 2 | atp8 | second splice in rrn28 |
| 229690 | 298056 | plus | nad5 exons 1 and 2 | rrn5 | second splice in rrn18 |
| 229690 | MT2:26347 | minus | nad5 exons 1 and 2 | trnM |  |
| 260131 | MT2:10860 | minus | trnE | ccmFc |  |
| 285490 | MT2:49914 | plus | trnN | rps12 | first splice in rrn28 |
| 285490 | MT2:136773 | plus | trnN | nad 4 exons 3 and 4 | first splice in rrn28 |
| 286104 | MT2:121378 | minus | trnN | nad4 | first splice in rrn28, second splice cite in cob gene |
| 286891 | MT2:15424 | minus | trnN | trnM | first splice in rrn28 |
| 287271 | 298036 | plus | trnN | rrn5 | first splice in rrn28, second splice in rrn16 |
| 287410 | MT2:49757 | plus | trnN | rps12 | first splice in rrn28, second splice in atp6 |
| 287410 | MT2:49747 | minus | trnN | rps12 | first splice in rrn28, second splice in atp6 |
| 287809 | MT2:98682 | minus | trnN | cob | first splice in rrn28 |
| 289893 | MT2:51 | minus | rrn26 | nad5 | first splice in atp8 |
| 298262 | MT2:40031 | plus | atp8 | atp6 | first splice in rrn16 |
| 299064 | MT2:49741 | plus | rrn5 | rps12 | second splice site in atp6 |
| 299235 | MT2:49808 | minus | rrn5 | rps12 | second splice site in atp6 |
| 299235 | MT2:49976 | minus | rrn5 | rps12 |  |
| 300617 | MT2:126830 | plus | rrn5 | nad4 |  |
|  |  |  |  |  |  |
| **MT2** |  |  |  |  |  |
| 9579 | 10497 |  | trnC-GCA | rps11-cp | second splice site in petD-cp |
| 2821 | 55961 |  |  | nad4-ex1 | first splice site in rps4 |
| 9616 | 10463 |  | trnC-GCA | trnM-CAT |  |
| 10992 | 49222 |  | petD-cp | cob |  |
| 12294 | 54643 |  | petD-cp | nad4-ex1 | first splice site in rps11-cp, second splice site in cob |
| 19608 | 54949 |  | nad2-ex4 | nad4-ex1 |  |
| 19833 | 21789 |  | nad2-ex3 | trnM-CAT | first splice in nad2-ex4, second splice in nad2-ex3 |
| 21963 | 48957 |  | trnM-CAT | cob |  |
| 49192 | 49744 |  | nad4L | cob | second splice site in psbA-cp-pseudo |
| 49633 | 50089 |  | nad4L | cob | first splice site in psbA-cp-pseudo, second splice site in psbA-cp-pseudo |
| 49653 | 49976 |  | nad4L | cob | first splice site in psbA-cp-pseudo, second splice site in psbA-cp-pseudo |
| 49790 | 136771 |  | nad4L |  | first splice site in psbA-cp-pseudo, second splice site in cox3 |
| 49997 | 97802 |  | nad4L | trnM-CAT | first splice site in psbA-cp-pseudo |
| 53730 | 107969 |  | nad4L | atp9 | first splice site in cob |
| 64524 | 88678 |  | cob | ccmFc-ex2 | first splice site in nad4-ex1, seond splice site in ccmFc-ex1 |
| 66727 | 70305 |  | nad4-ex1 | nad4-ex4 | first splice site in nad4-ex2, seond splice site in nad4-ex3 |
| 70574 | 73358 |  | nad4-ex2 | orf49 | first splice site in nad4-ex3, second splice site in nad4-ex4 |
| 71136 | 77358 |  | nad4-ex3 | nad5-ex4 |  |
| 82589 | 83642 |  | orf49-cp | orf104 | first exon in nad5-ex4, second exon in nad5-ex5 |
| 107825 | 136241 |  | trnM-CAT | cox3 |  |
| 114871 | 116891 |  | rpl16 | rps12 | first exon in rps3-ex2 |
| 133997 | 138016 |  | trnS-GCT |  | first exon in atpA-cp |

Summary of GC content in chloroplast, mitochondrial and nuclear genomes of a representative sample of Sacchainae. Table headers represent: species, species name; voucher or accession, species voucher, cultivar name or accession; GenBank accession, GenBank identifier of sequence (if available); reference, published reference for the sequence and GC Content (%), percentage GC content in the genome.