|  |  |
| --- | --- |
| Subset partitions | Best model |
| atp6 codon1, cox2 codon1, cox3 codon1, cytb codon1 | GTR+F+I+G4 |
| atp6 codon2, cox1 codon2, cox2 codon2, cox3 codon2, cytb codon2, nad3 codon2 | GTR+F+I+G4 |
| atp6 codon3 | HKY+F+I+G4 |
| atp8 codon1, nad2 codon1, nad3 codon1, nad6 codon1 | GTR+F+I+G4 |
| atp8 codon2, nad2 codon2, nad6 codon2 | GTR+F+G4 |
| atp8 codon3 | HKY+F+G4 |
| cox1 codon1 | GTR+F+G4 |
| cox1 codon3, cox2 codon3, cox3 codon3, cytb codon3 | GTR+F+I+G4 |
| nad1 codon1, nad4L codon1, nad4 codon1, nad5 codon1 | GTR+F+I+G4 |
| nad1 codon2, nad4L codon2, nad4 codon2, nad5 codon2 | GTR+F+I+G4 |
| nad1 codon3 | HKY+F+G4 |
| nad2 codon3 | HKY+F+G4 |
| nad3 codon3 | HKY+F+G4 |
| nad4L codon3, nad5 codon3 | HKY+F+G4 |
| nad4 codon3 | HKY+F+I+G4 |
| nad6 codon3 | HKY+F+G4 |

Table S1 The best-fit partitioning scheme and corresponding models used on the BI phylogenetic tree.