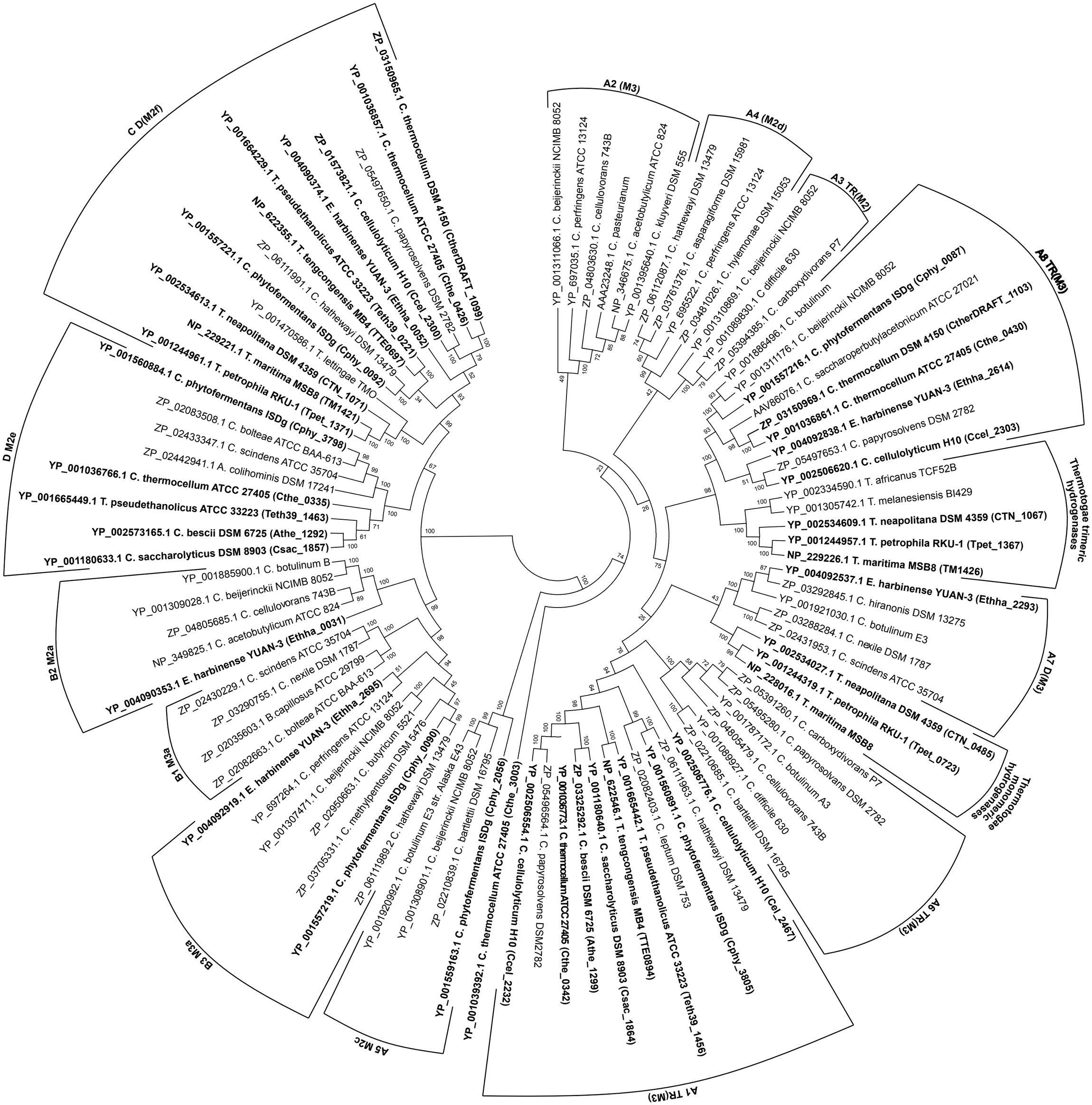
C D(M2f)
ZP_03150965.1 C. thermocellum DSM 4150 (CtherDRAFT_1099)
YP_001036857.1 C. thermocellum ATCC 27405 (Cthe_0426)
ZP_05497650.1 C. papyrosolvens DSM 2782
YP_001664229.1 T. pseudethanolicus ATCC 33223 (Teth39_0221)
ZP_01573821.1 C. cellulolyticum H10 (Ccel_2300)
YP_004090374.1 E. harbinense YUAN-3 (Ethha_0052)
NP_622355.1 T. tengcongensis MB4 (TTE0697)
ZP_06111991.1 C. hathewayi DSM 13479
YP_001557221.1 C. phytofermentans ISDg (Cphy_0092)
YP_001470586.1 T. lettingae TMO
YP_002534613.1 T. neapolitana DSM 4359 (CTN_1071)
NP_229221.1 T. maritima MSB8 (TM1421)
YP_001244961.1 T. petrophila RKU-1 (Tpet_1371)
YP_001560884.1 C. phytofermentans ISDg (Cphy_3798)
ZP_02083508.1 C. bolteae ATCC BAA-613
ZP_02433347.1 C. scindens ATCC 35704
ZP_02442941.1 A. colihominis DSM 17241
YP_001036766.1 C. thermocellum ATCC 27405 (Cthe_0335)
YP_001665449.1 T. pseudethanolicus ATCC 33223 (Teth39_1463)
YP_002573165.1 C. bescii DSM 6725 (Athe_1292)
YP_001180633.1 C. saccharolyticus DSM 8903 (Csac_1857)
D M2e
YP_001885900.1 C. botulinum B
YP_001309028.1 C. beijerinckii NCIMB 8052
ZP_04805685.1 C. cellulovorans 743B
NP_349825.1 C. acetobutylicum ATCC 824
YP_004090353.1 E. harbinense YUAN-3 (Ethha_0031)
ZP_02430229.1 C. scindens ATCC 35704
ZP_03290755.1 C. nexile DSM 1787
ZP_02035603.1 B.capillosus ATCC 29799
ZP_02082663.1 C. bolteae ATCC BAA-613
YP_004092919.1 E. harbinense YUAN-3 (Ethha_2695)
YP_697264.1 C. perfringens ATCC 13124
YP_001307471.1 C. beijerinckii NCIMB 8052
ZP_02950663.1 C. butyricum 5521
ZP_03705331.1 C. methylpentosum DSM 5476
YP_001557219.1 C. phytofermentans ISDg (Cphy_0090)
ZP_06111989.2 C. hathewayi DSM 13479
YP_001920992.1 C. botulinum E3 str. Alaska E43
YP_001308901.1 C. beijerinckii NCIMB 8052
ZP_02210839.1 C. bartlettii DSM 16795
YP_001559163.1 C. phytofermentans ISDg (Cphy_2056)
YP_001039392.1 C. thermocellum ATCC 27405 (Cthe_3003)
YP_002506554.1 C. cellulolyticum H10 (Ccel_2232)
B2 M2a
B1 M3a
B3 M3a
A5 M2c
A2 (M3)
A4 (M2d)
A3 TR(M2)
YP_001311066.1 C. beijerinckii NCIMB 8052
YP_697035.1 C. perfringens ATCC 13124
ZP_04803630.1 C. cellulovorans 743B
AAA23248.1 C. pasteurianum
NP_346675.1 C. acetobutylicum ATCC 824
YP_001395640.1 C. kluyveri DSM 555
ZP_06112087.1 C. hathewayi DSM 13479
ZP_03761376.1 C. asparagiforme DSM 15981
YP_695522.1 C. perfringens ATCC 13124
ZP_03481026.1 C. hylemonae DSM 15053
YP_001310869.1 C. beijerinckii NCIMB 8052
YP_001089830.1 C difficile 630
ZP_05394385.1 C. carboxydivorans P7
YP_001886496.1 C. botulinum
YP_001311176.1 C. beijerinckii NCIMB 8052
A8 TR(M3)
YP_001557216.1 C. phytofermentans ISDg (Cphy_0087)
AAV86076.1 C. saccharoperbutylacetonicum ATCC 27021
YP_001036861.1 C. thermocellum DSM 4150 (CtherDRAFT_1103)
ZP_03150969.1 C. thermocellum ATCC 27405 (Cthe_0430)
YP_004092838.1 E. harbinense YUAN-3 (Ethha_2614)
ZP_05497653.1 C. papyrosolvens DSM 2782
YP_002506620.1 C. cellulolyticum H10 (Ccel_2303)
YP_002334590.1 T. africanus TCF52B
YP_001305742.1 T. melanesiensis BI429
YP_002534609.1 T. neapolitana DSM 4359 (CTN_1067)
YP_001244957.1 T. petrophila RKU-1 (Tpet_1367)
NP_229226.1 T. maritima MSB8 (TM1426)
Thermotogae trimeric hydrogenases
YP_004092537.1 E. harbinense YUAN-3 (Ethha_2293)
ZP_03292845.1 C. hiranonis DSM 13275
YP_001921030.1 C. botulinum E3
ZP_03288284.1 C. nexile DSM 1787
ZP_02431953.1 C. scindens ATCC 35704
YP_002534027.1 T. neapolitana DSM 4359 (CTN_0485)
NP_228016.1 T. maritima MSB8
YP_001244319.1 T. petrophila RKU-1 (Tpet_0723)
A7 D(M3)
Thermotogae monomeric hydrogenases
ZP_05391260.1 C. carboxydivorans P7
ZP_01787172.1 C. botulinum A3
ZP_04805479.1 C. cellulovorans 743B
ZP_01089927.1 C. difficile 630
ZP_02210685.1 C. bartlettii DSM 16795
YP_002506776.1 C. cellulolyticum H10 (Cel_2467)
YP_001560891.1 C. phytofermentans ISDg (Cphy_3805)
ZP_06111963.1 C. hathewayi DSM 13479
ZP_02082403.1 C. leptum DSM 753
YP_001665442.1 T. pseudethanolicus ATCC 33223 (Teth39_1456)
NP_622546.1 T. tengcongensis MB4 (TTE0894)
YP_001180640.1 C. saccharolyticus DSM 8903 (Csac_1864)
ZP_03325292.1 C. bescii DSM 6725 (Athe_1299)
YP_001036773.1 C. thermocellum ATCC 27405 (Cthe_0342)
ZP_05496564.1 C. papyrosolvens DSM2782
A6 TR(M3)
A1 TR(M3)