bin	Distance	Novelty	P Values	Quality	Genes	Assembly	16S
2	The closest relatives found by MiGA in the database were Thermoanaerobacter kivui NZ CP009170T (47.17% AAI) and Thermoanaerobacter italicus Ab9 NC 013921T (47.12% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0), highest taxonomic rank with p-value ≤ 0.01 . It probably belongs to a genus not represented in the database (p-value: 0.015), highest taxonomic rank with p-value ≤ 0.1 . It possibly even belongs to an order not represented in the database (p-value: 0.29), highest taxonomic rank with p-value ≤ 0.5 .	P-values: root 0.97, domain 0.964, phylum 0.844, class 0.589, order 0.286, family 0.122, genus 0.015, species 0, subspecies 0.	Essential genes found: 106/111. Completeness: 95.5%. Contamination: 2.7%.		2,132,015 bp	No
4	The closest relative found by MiGA in the database was Aminobacterium colombiense DSM 12261 NC 014011T (99.39% ANI).	The dataset most likely belongs to a subspecies not represented in the database (p-value: 0.00084), highest taxonomic rank with p-value < 0.01. It probably belongs to a species not represented in the database (p-value: 0.038), highest taxonomic rank with p-value ≤ 0.1.	0.924, family 0.841, genus 0.671, species 0.0385, subspecies	Essential genes found: 101/111. Completeness: 91.0%. Contamination: 2.7%.		Contigs: 59 N50: 99,008 bp Total length: 1,870,943 bp G+C content: 45.3507 %	No
8	The closest relatives found by MiGA in the database were Sphaerochaeta globosa str. Buddy NC 015152T (49.24% AAI) and Sphaerochaeta pleomorpha str. Grapes NC 016633T (49.0% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.00077), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a genus not represented in the database (p-value: 0.044), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to an order not represented in the database (p-value: 0.42), highest taxonomic rank with p-value \leq 0.5.		Essential genes found: 88/111. Completeness: 79.3%. Contamination: 1.8%.	proteins: 1,635	Contigs: 275 N50: 6,978 bp Total length: 1,481,279 bp G+C content: 36.7963 %	No
9	The closest relatives found by MiGA in the database were Sulfurospirillum sp. UCH001 NZ AP014723 (52.6% AAI) and Sulfurospirillum deley/anum DSM 6946 NC 013512T (52.5% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.0015), highest taxonomic rank with p-value ≤ 0.01. It probably belongs to a genus not represented in the database (p-value: 0.09), highest taxonomic rank with p-value ≤ 0.1. It possibly even belongs to a family not represented in the database (p-value: 0.25), highest taxonomic rank with p-value ≤ 0.5.	P-values: root 0.989, domain 0.986, phylum 0.94, class 0.843, order 0.601, family 0.255, genus 0.0898, species 0.00154, subspecies 0.	Essential genes found: 103/111. Completeness: 92.8%. Contamination: 1.8%.	Predicted proteins: 1,817 Average length: 309.1976 aa Coding density: 95.0327 %	1,773,532 bp	No
10	The closest relatives found by MiGA in the database were Moorella thermoacetica NZ CP012370 (44.26% AAI) and Thermanaeromonas toyohensis ToBE NZ LT838272 (44.04% AAI).	The dataset most likely belongs to a genus not represented in the database (p-value: 0.0029), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a family not represented in the database (p-value: 0.059), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to a class not represented in the database (p-value: 0.29), highest taxonomic rank with p-value \leq 0.5.		Essential genes found: 87/111. Completeness: 78.4%. Contamination: 3.6%.	proteins: 2,114	Total length: 2,266,567 bp	No
12	The closest relatives found by MiGA in the database were Parvimonas micra NZ CP009761 (45.37% AAI) and Gottschalkia acidurici 9a NC 018664T (45.07% AAI).	The dataset most likely belongs to a genus not represented in the database (p-value: 0.0045), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a family not represented in the database (p-value: 0.075), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to a class not represented in the database (p-value: 0.43), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.958, domain 0.949, phylum 0.782, class 0.432, order	Essential genes found: 105/111. Completeness: 94.6%. Contamination: 0.9%.	Predicted proteins: 1,862 Average length: 310.4753 aa Coding density: 92.086 %	1,883,364 bp	No
13	The closest relatives found by MiGA in the database were Salinicoccus sp. BAB 3246 CP020916 (44.27% AAI) and Finegoldia magna ATCC 29328 NC 010376 (43.86% AAI).	The dataset most likely belongs to a genus not represented in the database (p-value: 0.0029), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a family not represented in the database (p-value: 0.059), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to a class not represented in the database (p-value: 0.29), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.945, domain 0.932, phylum 0.712, class 0.294, order	Essential genes found: 92/111. Completeness: 82.9%. Contamination: 2.7%.	Predicted proteins: 1,961 Average length: 315.1137 aa Coding density: 91.4539 %	2,027,047 bp	No
16	The closest relatives found by MiGA in the database were Sphaerochaeta globosa str. Buddy NC 015152T (56.63% AAI) and Sphaerochaeta pleomorpha str. Grapes NC 016633T (54.91% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.0038), highest taxonomic rank with p-value ≤ 0.01. It possibly even belongs to a family not represented in the database (p-value: 0.39), highest taxonomic rank with p-value ≤ 0.5.	P-values: root 0.994, domain 0.992, phylum 0.966, class 0.911, order 0.698, family 0.387, genus 0.193, species 0.00385, subspecies 0.	Essential genes found: 79/111. Completeness: 71.2%. Contamination: 1.8%.		1,836,334 bp	No
18	The closest relatives found by MiGA in the database were Thermanaeromonas toyohensis ToBE NZ LT838272 (43.24% AAI) and Moorella thermoacetica NZ CP012370 (43.18% AAI).	The dataset most likely belongs to a genus not represented in the database (p-value: 0.0021), highest taxonomic rank with p-value ≤ 0.01. It probably belongs to a family not represented in the database (p-value: 0.05), highest taxonomic rank with p-value ≤ 0.1. It possibly even belongs to a class not represented in the database (p-value: 0.2), highest taxonomic rank with p-value ≤ 0.5.	P-values: root 0.93, domain 0.914, phylum 0.634, class 0.202, order 0.131, family 0.0504, genus 0.00211, species 0, subspecies 0.	Completeness: 93.7%.		2,629,898 bp	No
	The closest relatives found by MiGA in the database were Virgibacillus sp. SK37 NZ CP007161 (56.82% AAI) and Virgibacillus halodenitrificans NZ CP017962 (56.82% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.0038), highest taxonomic rank with p-value ≤ 0.01. It possibly even belongs to a family not represented in the database (p-value: 0.39), highest taxonomic rank with p-value ≤ 0.5.		Completeness: 95.5%.		2,953,667 bp	No
21	The closest relatives found by MiGA in the database were Sphaerochaeta globosa str. Buddy NC 015152T (50.16% AAI) and Sphaerochaeta coccoides DSM 17374 NC 015436T (49.84% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.00077), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a genus not represented in the database (p-value: 0.058), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to an order not represented in the database (p-value: 0.49), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.984, domain 0.98, phylum 0.917, class 0.779, order 0.49, family 0.195, genus 0.0579, species 0.00077, subspecies 0.	Essential genes found: 101/111. Completeness: 91.0%. Contamination: 1.8%.	Predicted proteins: 1,716 Average length: 320.0542 aa Coding density: 94.2819 %	1,747,566 bp	No
22	The closest relatives found by MiGA in the database were Brevefilum fermentans NZ LT859958 (46.91% AAI) and Anaerolinea thermophila UNI 1 NC 014960T (45.84% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0), highest taxonomic rank with p-value ≤ 0.01 . It probably belongs to a genus not represented in the database (p-value: 0.13), highest taxonomic rank with p-value ≤ 0.1 . It possibly even belongs to an order not represented in the database (p-value: 0.27), highest taxonomic rank with p-value ≤ 0.5 .	P-values: root 0.969, domain 0.962, phylum 0.838, class 0.573, order 0.273, family 0.113, genus 0.0132, species 0, subspecies 0.	Completeness: 91.9%.		1,862,613 bp	Yes

The closest relatives found by MiGA in the database were Alkaliphilus oremlandii OhlLAs NC 009922T (57.32% AAI) and Clostridium aceticum NZ CP009687T (52.77% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.0038), highest taxonomic rank with p-value ≤ 0.01. It possibly even belongs to a family not represented in the database (p-value: 0.41), highest taxonomic rank with p-value ≤ 0.5.	P-values: root 0.994, domain 0.992, phylum 0.968, class 0.915, order 0.711, family 0.407, genus 0.213, species 0.00385, subspecies 0.	Completeness: 87.4%. Contamination:	Predicted proteins: 1,920 Average length: 294.8438 aa Coding density: 85.1223 %	1,995,130 bp	No
The closest relatives found by MiGA in the database were Solitalea canadensis DSM 3403 NC 017770T (46.7% AAI) and Pseudopedobacter saltans DSM 12145 NC 015177T (46.54% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a genus not represented in the database (p-value: 0.012), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to an order not represented in the database (p-value: 0.26), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.967, domain 0.96, phylum 0.83, class 0.553, order 0.259, family 0.1, genus 0.0119, species 0, subspecies 0.	Completeness: 94.6%. Contamination:	proteins: 2,027 Average length: 380.9773 aa Coding density:	37.6098 %	Yes
The closest relatives found by MiGA in the database were Thermanaeromonas toyohensis ToBE NZ LT838272 (45.5% AAI) and Moorella thermoacetica NZ CP012370 (45.29% AAI).	The dataset most likely belongs to a genus not represented in the database (p-value: 0.0045), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a family not represented in the database (p-value: 0.076), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to a class not represented in the database (p-value: 0.45), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.96, domain 0.951, phylum 0.791, class 0.453, order 0.209, family 0.0765, genus 0.00448, species 0, subspecies 0.	Completeness: 92.8%. Contamination:	proteins: 2,311 Average length: 301.5448 aa Coding density:	2,353,534 bp G+C content:	No
The closest relatives found by MiGA in the database were Mageeibacillus indolicus UPII9 5 NC 013895 (42.57% AAI) and Salinicoccus sp. BAB 3246 CP020916 (42.33% AAI).	The dataset most likely belongs to a genus not represented in the database (p-value: 0.0011), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a family not represented in the database (p-value: 0.035), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to a class not represented in the database (p-value: 0.16), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.922, domain 0.905, phylum 0.593, class 0.162, order 0.102, family 0.035, genus 0.00105, species 0, subspecies 0.	Completeness: 76.6%. Contamination:	proteins: 1,250 Average length: 346.9384 aa	Contigs: 53 N50: 47,751 bp Total length: 1,419,736 bp G+C content: 58.5643 %	No
The closest relatives found by MiGA in the database were Bacteroidales bacterium CF NZ CP006772 (52.6% AAI) and Alistipes finegoldii DSM 17242 NC 018011T (47.47% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.0015), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a genus not represented in the database (p-value: 0.087), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to a family not represented in the database (p-value: 0.25), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.988, domain 0.986, phylum 0.94, class 0.84, order 0.597, family 0.252, genus 0.0874, species 0.00154, subspecies 0.	Completeness: 93.7%.	proteins: 1,576 Average length: 359.0425 aa	1,776,920 bp G+C content:	No
The closest relatives found by MiGA in the database were Thermanaeromonas toyohensis ToBE NZ LT838272 (42.65% AAI) and Moorella thermoacetica NZ CP012370 (42.63% AAI).	The dataset most likely belongs to a genus not represented in the database (p-value: 0.0013), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a family not represented in the database (p-value: 0.037), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to a class not represented in the database (p-value: 0.17), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.923, domain 0.906, phylum 0.599, class 0.166, order 0.107, family 0.0373, genus 0.00132, species 0, subspecies 0.	Completeness: 94.6%. Contamination:	proteins: 2,257 Average length: 306.8157 aa Coding density:	Contigs: 65 N50: 76,006 bp Total length: 2,415,161 bp G+C content: 38.8996 %	No
The closest relatives found by MiGA in the database were Salinicoccus sp. BAB 3246 CP020916 (43.38% AAI) and Candidatus Izimaplasma sp. HR1 NZ CP009415 (43.23% AAI).	The dataset most likely belongs to a genus not represented in the database (p-value: 0.0021), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a family not represented in the database (p-value: 0.051), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to a class not represented in the database (p-value: 0.21), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.931, domain 0.916, phylum 0.641, class 0.208, order 0.134, family 0.0513, genus 0.00211, species 0, subspecies 0.	Completeness: 94.6%. Contamination:	proteins: 1,551 Average length: 342.4223 aa	Contigs: 31 N50: 90,230 bp Total length: 1,752,382 bp G+C content: 46.9533 %	No
The closest relatives found by MiGA in the database were Clostridium clariflavum DSM 19732 NC 016627T (42.46% AAI) and Ruminiclostridium thermocellum DSM 1313 NC 017304 (42.26% AAI).	The dataset most likely belongs to a genus not represented in the database (p-value: 0.00053), highest taxonomic rank with p-value \leq 0.01. It probably belongs to an order not represented in the database (p-value: 0.096), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to a class not represented in the database (p-value: 0.16), highest taxonomic rank with p-value \leq 0.5.		Completeness: 93.7%. Contamination:	proteins: 1,479 Average length: 346.288 aa	Contigs: 91 N50: 37,261 bp Total length: 1,705,474 bp G+C content: 50.7564 %	No
The closest relatives found by MiGA in the database were Desulfobulbus sp. ORNL NZ CP021255 (57.99% AAI) and Desulfobulbus propionicus DSM 2032 CP002364T (55.28% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.0038), highest taxonomic rank with p-value ≤ 0.01. It possibly even belongs to a family not represented in the database (p-value: 0.43), highest taxonomic rank with p-value ≤ 0.5.	P-values: root 0.994, domain 0.993, phylum 0.969, class 0.919, order 0.723, family 0.428, genus 0.229, species 0.00385, subspecies 0.	Completeness: 92.8%.	proteins: 2,341 Average length: 310.8637 aa	Contigs: 185 N50: 21,010 bp Total length: 2,457,827 bp G+C content: 54.3237 %	No
(47.85% AAI) and Proteiniphilum	The dataset most likely belongs to a species not represented in the database (p-value: 0.00077), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a genus not represented in the database (p-value: 0.023), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to an order not represented in the database (p-value: 0.33), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.975, domain 0.969, phylum 0.869, class 0.654, order 0.333, family 0.145, genus 0.0229, species 0.00077, subspecies 0.	94.6%. Contamination:	proteins: 2,566 Average length: 353.334 aa Coding density:	2,989,223 bp	No
The closest relative found by MiGA in the database was Methanoculleus sp. MAB1 NZ LT158599 (98.36% ANI).	The dataset most likely belongs to a subspecies not represented in the database (p-value: 0.00084), highest taxonomic rank with p-value ≤ 0.01. It probably belongs to a species not represented in the database (p-value: 0.038), highest taxonomic rank with p-value ≤ 0.1.	0.924, family 0.841, genus 0.67, species 0.0377, subspecies	found: 21/26. Completeness: 80.8%. Contamination:	proteins: 2,397 Average length: 278.3146 aa Coding density:	2,323,366 bp G+C content:	No
The closest relatives found by MiGA in the database were Mycoplasma parvum str. Indiana NC 022575 (38.6% AAI) and Mycoplasma haemofelis str. Langford 1 NC 014970 (37.82% AAI).	The dataset most likely belongs to a family not represented in the database (p-value: 0.0087), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a class not represented in the database (p-value: 0.054), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to a phylum not represented in the database (p-value: 0.33), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.837, domain 0.802, phylum 0.33, class 0.0537, order 0.0223, family 0.00865, genus 0, species 0, subspecies 0.	found: 88/111. Completeness: 79.3%. Contamination:	proteins: 583 Average length: 284.3156 aa	Contigs: 54 N50: 16,519 bp Total length: 531,477 bp G+C content: 32.3147 %	Yes

57	The closest relatives found by MiGA in the database were Sphaerochaeta globosa str. Buddy NC 015152T (49.64% AAI) and Sphaerochaeta pleomorpha str. Grapes NC 016633T (49.44% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.00077), highest taxonomic rank with p-value \leq 0.01. It probably belongs to a genus not represented in the database (p-value: 0.053), highest taxonomic rank with p-value \leq 0.1. It possibly even belongs to an order not represented in the database (p-value: 0.45), highest taxonomic rank with p-value \leq 0.5.	P-values: root 0.983, domain 0.979, phylum 0.909, class 0.761, order 0.452, family 0.188, genus 0.0529, species 0.00077, subspecies 0.	found: 103/111. Completeness: 92.8%. Contamination:	332.7132 aa	Contigs: 19 N50: 152,839 bp Total length: 1,770,553 bp G+C content: 40.6247 %	No
59	The closest relatives found by MiGA in the database were Petrimonas mucosa NZ LT608328T (58.95% AAI) and Proteiniphilum saccharofermentans NZ LT605205T (58.86% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.0038), highest taxonomic rank with p-value ≤ 0.01. It possibly even belongs to a family not represented in the database (p-value: 0.46), highest taxonomic rank with p-value ≤ 0.5.	P-values: root 0.994, domain 0.993, phylum 0.971, class 0.924, order 0.739, family 0.457, genus 0.257, species 0.00385, subspecies 0.	found: 106/111. Completeness: 95.5%. Contamination:	Predicted proteins: 1,737 Average length: 370.2619 aa Coding density: 91.4291 %	Contigs: 74 N50: 50,989 bp Total length: 2,110,307 bp G+C content: 41.4571 %	No
62	The closest relatives found by MiGA in the database were Pelotomaculum thermopropionicum SI AP09389T (56.61% AAI) and Desulfofundulus kuznetsovii DSM 6115 CP002770T (51.9% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.0038), highest taxonomic rank with p-value ≤ 0.01. It possibly even belongs to a family not represented in the database (p-value: 0.39), highest taxonomic rank with p-value ≤ 0.5.	P-values: root 0.994, domain 0.992, phylum 0.966, class 0.911, order 0.698, family 0.387, genus 0.193, species 0.00385, subspecies 0.	found: 106/111. Completeness: 95.5%. Contamination:	289.2015 aa	Contigs: 87 N50: 62,504 bp Total length: 2,363,537 bp G+C content: 47.0953 %	Yes
63	The closest relatives found by MiGA in the database were Pseudomonas stutzeri NZ CP027543 (59.64% AAI) and Pseudomonas sp. R2A2 NZ CP029772 (59.62% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.0038), highest taxonomic rank with p-value ≤ 0.01. It possibly even belongs to a family not represented in the database (p-value: 0.48), highest taxonomic rank with p-value ≤ 0.5.	P-values: root 0.995, domain 0.993, phylum 0.972, class 0.927, order 0.748, family 0.475, genus 0.27, species 0.00385, subspecies 0.	found: 104/111. Completeness: 93.7%. Contamination:		Contigs: 35 N50: 83,678 bp Total length: 2,420,099 bp G+C content: 56.6054 %	Yes
64	The closest relatives found by MiGA in the database were Alkaliphilus oremlandii OhlLAs NC 009922T (58.02% AAI) and Clostridium aceticum NZ CP009687T (53.25% AAI).	The dataset most likely belongs to a species not represented in the database (p-value: 0.0038), highest taxonomic rank with p-value ≤ 0.01. It possibly even belongs to a family not represented in the database (p-value: 0.43), highest taxonomic rank with p-value ≤ 0.5.	P-values: root 0.994, domain 0.993, phylum 0.97, class 0.92, order 0.725, family 0.431, genus 0.233, species 0.00385, subspecies 0.	found: 101/111. Completeness: 91.0%. Contamination:	Predicted proteins: 1,649 Average length: 296.6434 aa Coding density: 85.895 %	Contigs: 90 N50: 33,808 bp Total length: 1,708,476 bp G+C content: 38.5952 %	No