

,Limnohabitans(59)

,Rhodoferrax(16)

,Candidatus Symbiobacter(3)

,Rhodoferrax(5)

,uncultured(1)

,Polaronomas(8)

,Acidovorax(16)

,Brachymonas,Tibeticola(2)

,Diaphotobacter(4)

,RS62 marine group(9)

,Malikia,Hydrogenophaga(2)

,Ottowia,Candidatus(2)

,Candidatus(3)

,Curvibacter,uncultured,Rhizobacter,Piscinibacter(7)

,Aquabacterium(1)

,Leptothrix(6)

,Ideonella,Pelomonas,Roseateles,Inhella,uncultured,Tepidimonas,AAP99(9)

,GKS98 freshwater group,Kerstesia,uncultured,MWH-UniP1 aquatic group(12)

,Burkholderia-Caballeronia-Paraburkholderia(17)

,Polynucleobacter(51)

,Massilia(4)

,Dugesiella(1)

,Uncultured(1)

,Herbaspirillum,Novinebaspirillum(4)

,uncultured(3)

,Lautropia,uncultured(1)

,uncultured bacterium(5)

,GOUTA6,IS-44(3)

,MND1,uncultured beta proteobacterium,uncultured bacterium(3)

,OM43 clade(19)

,Candidatus Methylopusillus(11)

,Methylothera(21)

,Methylophilus(3)

,Methylothera(2)

,uncultured(6)

,Sideroxy MM2(2)

,Candidatus, Vitrova(2)

,Uliginosibacterium,Zoonos(2)

,uncultured(2)

,Dechloromonas,Alcaligenes(1)

,Rhodanthe(1)

,Cycloclostridium,uncultured gamma proteobacterium(2)

,Glaciecola,Paraglaciecola(18)

,Alteromonas(5)

,Colwellia,Thalassotalea(6)

,Colwellia(3)

,Thalassotalea,Psychromonas,Motilimonas,Pseudoalteromonas(8)

,Psychrosphaera(1)

,Vibrio(14)

,Alivibrio(1)

,Photobacterium,Enterovibrio,Vibrio(2)

,Pantoea,Rhaphis(2)

,Shewanella(6)

,Oceanospirillum(1)

,Neptunomonas(1)

,Marinobacterium(3)

,Marinomonas(4)

,Thalassotalea(3)

,Oceaniserpentulus,uncultured(1)

,uncultured marine bacterium,uncultured marine bacterium(2)

,uncultured bacterium,marine metagenome,uncultured marine bacterium(6)

,uncultured bacterium,SAR86 cluster bacterium BACL1 MAG-12007-1m14(2)

,SUP05 cluster(3)

,Litoricola(10)

,uncultured gamma proteobacterium(2)

,uncultured bacterium,marine gamma proteobacterium,uncultured(7)

,Oleiphilus(4)

,uncultured marine bacterium(1)

,OM60(NOR5) clade(5)

,OM60(NOR5) clade(1)

,Helicobacter(5)

,OM60(NOR5) clade(6)

,Pseudocella(1)

,OM60(NOR5) clade(3)

,Sinobacterium,uncultured(2)

,SAR92 clade(17)

,C1-B045(2)

,Porticoccus,Candidatus Endobugula(4)

,Uncultured(1)

,Umbellula(2)

,Acinetobacter(4)

,Pseudomonas(1)

,[Agitococcus] lubricus group,Fluvicoccus,metagenome(4)

,Pseudohongiella(14)

,Blv10(3)

,Alcanivorax(1)

,Pseudomonas(5)

,Francisella,[Caedibacter] taeniospiralis group(4)

,Rickettsiella,Methyloparacoccus,uncultured(4)

,uncultured gamma proteobacterium,uncultured(3)

,Woesia,uncultured(1)

,Marinicella,Methylobacter(5)

,Crenothrix(3)

,Methylophilus(1)

,Methylophilus(2)

,Lecococcus,uncultured(4)

,Planktomarina(81)

,Octadecabacter(3)

,uncultured(3)

,uncultured(6)

,Planktotalea,Ascidiaeihabitans,uncultured(6)

,Pseudopelagicola(1)

,Amylobacter(6)

,Roseobacter clade NAC117,uncultured(1)

,Sulfitobacter(29)

,Roseobacter,Sulfitobacter(6)

,Litorimicrobium,Salinihabitans,Tropicobacter(3)

,Lentibacter(6)

,Tateyamaia(1)

,Lokanella(7)

,uncultured,Ketogulonigenium,Seohaecicola,Leisingera,Phaeobacter(7)

,Seohaecicola(1)

,Maduococcus(1)

,Pseudocella(1)

,Rhodococcus(2)

,uncultured,Rhodobacter(5)

,Pseudorhodobacter,Albinobacter(2)

,Pseudorhodobacter,uncultured(1)

,Litoricola(1)

,Hyphomicrobium(1)

,Allophazium-Neorhizobium-Pararhizobium-Rhizobium(4)

,Brevundimonas,Phenylobacterium(7)

,uncultured(3)

,Methylophilus(1)

,Methylocystis,Bradyrhizobium,Amylobacter(3)

,Ancylobacter,uncultured(1)

,Pedomicrobium,Hyphomicrobium(2)

,Novosphingobium(13)

,Erythrobacter(4)

,Altererythrobacter(3)

,Novosphingobium(1)

,Sphingobadus(9)

,uncultured(1)

,Sphingomonas(6)

,Safraia,uncultured(1)

,Clade Ia(71)

,Clade Ib(1)

,uncultured,uncultured bacterium,uncultured Pelagibacteriales bacterium(5)

,uncultured Pelagibacteriales bacterium(1)

,uncultured Pelagibacteriales bacterium(1)

,uncultured bacterium,uncultured Pelagibacteriales bacterium(8)

,uncultured bacterium(3)

,uncultured alpha proteobacterium(1)

,uncultured marine bacterium(1)

,uncultured marine bacterium(2)

,uncultured marine bacterium,metagenome(2)

,uncultured bacterium,uncultured(2)

,uncultured marine bacterium(1)

,Roseomonas,uncultured(1)

,uncultured marine bacterium(6)

,Candidatus Puncicepsirillum,uncultured bacterium(3)

,unidentified marine bacterium,uncultured(1)

,uncultured alpha proteobacterium(1)

,uncultured marine bacterium(1)

,uncultured bacterium,uncultured alpha proteobacterium(3)

,uncultured alpha proteobacterium(1)

,uncultured alpha proteobacterium,uncultured(1)

,Candidatus, Magara(5)

,uncultured,alpha proteobacterium P-20,Reyranella,uncultured(4)

,Azospirillum,uncultured,uncultured bacterium(4)

,Arcobacter(12)

,Sulfuroxum,Sulfurimonas(2)

,Sulfuroxum,OM27 clade(7)

,Peredibacter(3)

,uncultured proteobacterium(1)

,uncultured SAR324 cluster bacterium,hydrothermal vent metagenome(2)

,uncultured bacterium,Desulfuromonas(3)

,uncultured bacterium,uncultured(1)

,Hydrocyclophaga(1)

,Polaribacter 1(4)

,Polaribacter,Polaribacter 3,Polaribacter 2(10)

,Polaribacter 3,Polaribacter 2(3)

,Polaribacter 4,Polaribacter(3)

,uncultured bacterium,huanghezhansensis,Aurantivirga(5)

,Tenacibaculum(5)

,Flavicella(2)

,Lutibacter(6)

,Lutimonas(1)

,NS5 marine group(21)

,NS4 marine group,Aquibacter,Algibacter(12)

,Gaetbulibacter,Oligobacter(2)

,Mesorubra(1)

,Psychrosphaera,Hopfia(2)

,Formosa(5)

,Arcticiflavibacter,NS2b marine group(2)

,Flavobacterium(71)

,uncultured(5)

,Korarchaeum,uncultured(1)

,NS3a marine group(16)

,uncultured(2)

,uncultured(1)

,Ulvibacter(7)

,uncultured(30)

,Phaeocystidibacter(1)

,uncultured(7)

,uncultured marine bacterium(1)

,uncultured Bacteroidetes,Chlorobi group bacterium(5)

,uncultured bacterium,uncultured marine bacterium(1)

,uncultured bacterium,uncultured marine bacterium(1)

,uncultured Bacteroidetes bacterium,uncultured Bacteroidetes bacterium,uncultured bacterium(6)

,uncultured bacterium,seawater metagenome,uncultured bacterium,NS10 marine group(6)

,Fluvicola(40)

,uncultured(2)

,Salinirepens(2)

,uncultured Bacteroidetes,Chlorobi group bacterium(1)

,uncultured marine bacterium,uncultured(1)

,seawater metagenome,uncultured bacterium(2)

,uncultured marine bacterium(2)

,uncultured bacterium(3)

,uncultured Bacteroidetes bacterium(3)

,uncultured bacterium(1)

,uncultured bacterium(1)

,uncultured bacterium,uncultured Bacteroidetes bacterium(1)

,metagenome(1)

,Pedobacter,uncultured,Soiltalea(6)

,uncultured bacterium,uncultured(1)

,uncultured bacterium,uncultured(1)

,uncultured bacterium,metagenome,uncultured Bacteroidetes bacterium(18)

,uncultured bacterium(1)

,uncultured Sphingobacteria bacterium(5)

,Roseitritirus,CCP-132(2)

,uncultured bacterium,uncultured(1)

,bacterium enriched in the zone A10,uncultured(1)

,Sediminibacterium(25)

,uncultured,Dinghuibacter(13)

,uncultured(2)

,Ferruginibacter(8)

,uncultured(4)

,uncultured bacterium(1)

,Bacteroidetes bacterium(1)

,Lewinella(2)

,Candidatus Aquilares(1)

,uncultured,Aureospira(4)

,Pseudarcicella(10)

,Flectobacillus(3)

,Lachnabacter(1)

,OLB12,uncultured,Algoriphagus,Cytophaga(8)

,Hymenobacter(1)

,Marinobacter(1)

,Baileia,uncultured bacterium,uncultured(1)

,Persicirhabdus(5)

,Rubritalea,Roseibacillus(3)

,Luteolibacter(7)

,Prostheobacter(8)

,uncultured(3)

,Chthonibacter(4)

,LD29,Terrimicrobium(1)

,FukuN18 freshwater group(2)

,uncultured marine bacterium(1)

,uncultured Verrucomicrobia bacterium,uncultured(1)

,uncultured Verrucomicrobia bacterium,uncultured(1)

,uncultured Crater Lake bacterium CL120-133,uncultured bacterium(2)

,IMCC26134,uncultured,Cephalotococcus,Opiritus,Lacunisphaera(14)

,Diplosphaera(1)

,uncultured(1)

,MB11C04 marine group(1)

,uncultured(3)

,Blastopirellula,Rhodocyclus(1)

,Plancton(1)

,uncultured(6)

,CL500-3(6)

,uncultured Crater Lake bacterium CL500-15,unidentified plactonocyte(2)

,uncultured marine bacterium(4)

,Gemmatimonas,uncultured Acidobacteria bacterium(1)

,metagenome,uncultured bacterium(1)

,uncultured marine group(3)

,Nitrospira(2)

,hgcl clade(19)

,Candidatus Planktophila(3)

,uncultured bacterium(2)

,hgcl clade(11)

,uncultured bacterium,metagenome,hgcl clade(11)

,hgcl clade(31)

,uncultured(1)

,uncultured(1)

,uncultured Actinomycetales bacterium,uncultured(1)

,uncultured Actinomycetales bacterium,uncultured(1)

,uncultured Actinomycetales bacterium,uncultured bacterium,Rhodoluna,Candidatus Flaviluna(11)

,Candidatus Flaviluna(4)

,Candidatus Planktoluna(7)

,uncultured(1)

,M1001(1)

,Aurantimicrobium(5)

,Safraia(1)

,Cryobacterium,Galbitalea,Mycobacterium(14)

,CL500-29 marine group(14)

,Ilumatobacter(2)

,Sva0996 marine group,IMCC26207(2)

,uncultured bacterium,uncultured actinobacterium(2)

,Actinobacteria bacterium,uncultured actinobacterium(2)

,Candidatus Actinomarina(7)

,uncultured(1)

,Gaetbulibacter(2)

,Gaiella,Clostridium(2)

,Clostridium sensu stricto 13,Thiococcus(2)

,Exiguobacterium,Acholeplasma,Synechococcus CC9902(27)

,Cyanobium PCC-6307(17)

,Cyanobacterium(1)

,Atelocyanobacterium (UCYN-A)(1)

,Dolichospermum NIES-24,Cyanobacterium M118(1)

,uncultured Pseudanabaena PCC-7929(1)

,uncultured candidate division WSS-1(1)

,Armatimonas,uncultured bacterium,uncultured termite group 1 bacterium(5)

,Candidatus Nitrosopumilus(6)

,Candidatus Nitrosopumilus(1)

,uncultured archaeon,uncultured marine group II euryarchaeote,uncultured marine archaeon(2)

,uncultured archaeon,uncultured marine archaeon(2)

