```
k_Archaea;p_Euryarchaeota;c_Halobacteria;o_Halobacteriales;f_Halobacteriaceae;g_
     k_Archaea;p_Euryarchaeota;c_Halobacteria;o_Halobacteriales;f_Halobacteriaceae;g_Haloplanus
 k_Archaea;p_Euryarchaeota;c_Halobacteria;o_Halobacteriales;f_Halobacteriaceae;g_Halorhabdus
k_Archaea;p_Euryarchaeota;c_Halobacteria;o_Halobacteriales;f_Halobacteriaceae;g_Natronomonas
k_Archaea;p_Euryarchaeota;c_Methanobacteria;o_Methanobacteriales;f_MSBL1;g_
k_Archaea;p_Euryarchaeota;c_Thermoplasmata;o_E2;f_DHVEG-1;g_
k_Bacteria;p_AD3;c_ABS-6;o_;f_;g_
k_Bacteria;p_AD3;c_JG37-AG-4;o_;f_;g_
k_Bacteria;p_Acidobacteria;c_Acidobacteria-5;o__;f__;g__
k_Bacteria;p_Acidobacteria;c_Acidobacteria-6;o_CCU21;f_;g_
k_Bacteria;p_Acidobacteria;c_Acidobacteria-6;o_iii1-15;f_;g_
k_Bacteria;p_Acidobacteria;c_Acidobacteriia;o_Acidobacteriales;f_Acidobacteriaceae;g_
k_Bacteria;p_Acidobacteria;c_Acidobacteriia;o_Acidobacteriales;f_Koribacteraceae;g_
     k\_Bacteria; p\_Acidobacteria; c\_Acidobacteriia; o\_Acidobacteriales; f\_Koribacteraceae; g\_Candidatus\ Koribacteraceae; g\_Can
k_Bacteria;p_Acidobacteria;c_BPC102;o_MVS-40;f_;g_
k_Bacteria;p_Acidobacteria;c_DA052;o_Ellin6513;f_;g_
k_Bacteria;p_Acidobacteria;c_Solibacteres;o_Solibacterales;f_;g_
k_Bacteria;p_Acidobacteria;c_Solibacteres;o_Solibacterales;f_Solibacteraceae;g_Candidatus Solibacter
k_Bacteria;p_Acidobacteria;c_Sva0725;o_Sva0725;f_;g_
k_Bacteria;p_Acidobacteria;c_TM1;o_;f_;g_
k_Bacteria;p_Acidobacteria;c_[Chloracidobacteria];o_11-24;f_;g_
k_Bacteria;p_Acidobacteria;c_[Chloracidobacteria];o_DS-100;f_;g_
k_Bacteria;p_Acidobacteria;c_[Chloracidobacteria];o_RB41;f_;g_
k_Bacteria;p_Acidobacteria;c_[Chloracidobacteria];o_RB41;f_Ellin6075;g_
k_Bacteria;p_Acidobacteria;c_iii1-8;o_DS-18;f_;g_
k_Bacteria;p_Actinobacteria;c_Acidimicrobiia;o_Acidimicrobiales;f_;g_
k_Bacteria;p_Actinobacteria;c_Acidimicrobiia;o_Acidimicrobiales;f_EB1017;g_
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f__;g__
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micromonosporaceae;Other
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micromonosporaceae;g_
 k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micromonosporaceae;g_Catellatospora
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Mycobacteriaceae;g_Mycobacterium
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Pseudonocardiaceae;g_
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomycetaceae;g_Streptomyces
k_Bacteria;p_Actinobacteria;c_MB-A2-108;o_0319-7L14;f_;g_
k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Gaiellales;f_Gaiellaceae;g_
k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_;g_
k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Conexibacteraceae;g_
k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Patulibacteraceae;g_
k_Bacteria;p_Bacteroidetes;c_;o_;f_;g_
k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_;g_
k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae;g_Gramella
     k_Bacteria;p_Bacteroidetes;c_[Rhodothermi];o_[Rhodothermales];f_[Balneolaceae];g_KSA1
k_Bacteria;p_Bacteroidetes;c_[Saprospirae];o_[Saprospirales];f_Chitinophagaceae;g_
k_Bacteria;p_Bacteroidetes;c_[Saprospirae];o_[Saprospirales];f_Chitinophagaceae;g_Flavisolibacter
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_Anaerolineales;f_Anaerolinaceae;g_Anaerolinea
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_CFB-26;f_;g_
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_GCA004;f_;g_
k_Bacteria;p_Chloroflexi;c_Ktedonobacteria;o_Thermogemmatisporales;f_Thermogemmatisporaceae;g_
k_Bacteria;p_Chloroflexi;c_P2-11E;o_;f_;g_
k_Bacteria;p_Chloroflexi;c_TK10;o_B07_WMSP1;f__;g_
k_Bacteria;p_Elusimicrobia;c_Elusimicrobia;o_FAC88;f_;g_
k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_;g_
k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae;g_Alicyclobacillus
k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae;g_Bacillus
k_Bacteria;p_Gemmatimonadetes;c_Gemm-1;o_;f_;g_
k_Bacteria;p_Gemmatimonadetes;c_Gemm-2;o_;f_;g_
k_Bacteria;p_Gemmatimonadetes;c_Gemm-4;o__;f__;g__
k_Bacteria;p_Gemmatimonadetes;c_Gemmatimonadetes;o_;f_;g_
 k_Bacteria;p_Gemmatimonadetes;c_Gemmatimonadetes;o_N1423WL;f_;g_
k_Bacteria;p_Nitrospirae;c_Nitrospira;o_Nitrospirales;f_;g_
k_Bacteria;p_Nitrospirae;c_Nitrospira;o_Nitrospirales;f_0319-6A21;g_
k_Bacteria;p_Nitrospirae;c_Nitrospira;o_Nitrospirales;f_Nitrospiraceae;g_Nitrospira
k_Bacteria;p_Nitrospirae;c_Nitrospira;o_Nitrospirales;f_[Thermodesulfovibrionaceae];g_GOUTA19
k_Bacteria;p_OP1;c_KB1;o_;f_;g_
k_Bacteria;p_OP8;c_OP8_1;o_HMMVPog-54;f__;g_
k_Bacteria;p_Planctomycetes;c_Phycisphaerae;o_WD2101;f__;g__
k_Bacteria;p_Proteobacteria;c__;o__;f__;g__
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Caulobacterales;f_Caulobacteraceae;g_
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Caulobacterales;f_Caulobacteraceae;g_Phenylobacterium
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Ellin329;f_;g_
      k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f__;g_
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Bradyrhizobiaceae;g_
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Bradyrhizobiaceae;g_Bradyrhizobium
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae;g_
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae;g_Devosia
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae;g_Rhodoplanes
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae;g_
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodospirillales;f_Rhodospirillaceae;g_
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria;Other
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Erythrobacteraceae;g_
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Kaistobacter
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;Other;Other
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_;f_;g_
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_A21b;f_EB1003;g_
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae;g_Burkholderia
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;Other
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_
 k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Ramlibacter
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae;g_
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Ellin6067;f_;g_
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_MND1;f_;g_
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae;g_
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_Dechloromonas
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_SC-I-84;f_;g_
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Thiobacterales;f_;g_
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfarculales;f_Desulfarculaceae;g_
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfobacterales;f_Desulfobacteraceae;g_
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfohalobiaceae;g_
      k\_Bacteria; p\_Proteobacteria; c\_Deltaproteobacteria; o\_Desulfovibrionales; f\_Desulfohalobiaceae; g\_Desulfovermiculus
\verb| k_Bacteria; p_Proteobacteria; c_Delta proteobacteria; o_Desulfuro monadales; f_Geobacteraceae; g_Geobacteraceae; delta proteobacteria; o_Desulfuro monadales; f_Geobacteraceae; delta proteobacteraceae; delta prote
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfuromonadales;f_Pelobacteraceae;g_
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_;g_
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Haliangiaceae;g_
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Myxococcaceae;g_
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Myxococcaceae;g_Anaeromyxobacter
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_NB1-j;f_NB1-i;g_
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Syntrophobacterales;f_Syntrophobacteraceae;g_
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_[Entotheonellales];f_[Entotheonellaceae];g_
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Chromatiales;f_Ectothiorhodospiraceae;g_
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Chromatiales;f_Ectothiorhodospiraceae;g_Halorhodospira
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Chromatiales;f_Halothiobacillaceae;g_Halothiobacillus
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae;g_Erwinia
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Oceanospirillales;f_Halomonadaceae;g_Candidatus Portiera
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Oceanospirillales;f_Oceanospirillaceae;g_
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Thiotrichales;f_Piscirickettsiaceae;g_
 k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Sinobacteraceae;g_
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Sinobacteraceae;g_Steroidobacter
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae;g_
k_Bacteria;p_Spirochaetes;c_Spirochaetes;o_Spirochaetales;f_Spirochaetaceae;g_
k_Bacteria;p_Spirochaetes;c_Spirochaetes;o_Spirochaetales;f_Spirochaetaceae;g_Spirochaeta
k_Bacteria;p_Verrucomicrobia;c_[Pedosphaerae];o_[Pedosphaerales];f_;g_
k_Bacteria;p_Verrucomicrobia;c_[Pedosphaerae];o_[Pedosphaerales];f_Ellin515;g_
k_Bacteria;p_Verrucomicrobia;c_[Pedosphaerae];o_[Pedosphaerales];f_OPB35;g_
k_Bacteria;p_Verrucomicrobia;c_[Pedosphaerae];o_[Pedosphaerales];f_auto67_4W;g_
k_Bacteria;p_Verrucomicrobia;c_[Spartobacteria];o_[Chthoniobacterales];f_[Chthoniobacteraceae];g_Candidatus Xiphinematobacter
k_Bacteria;p_Verrucomicrobia;c_[Spartobacteria];o_[Chthoniobacterales];f_[Chthoniobacteraceae];g_DA101
k_Bacteria;p_WS3;c_PRR-12;o_Sediment-1;f_;g_
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k_Archaea;p_Crenarchaeota;c_MBGA;o_NRP-J;f_;g_ k_Archaea;p_Crenarchaeota;c_MCG;o_pGrfC26;f_;g_

k_Archaea;p_Crenarchaeota;c_Thaumarchaeota;o_Cenarchaeales;f_SAGMA-X;g_

k_Archaea;p_Crenarchaeota;c_Thaumarchaeota;o_Nitrososphaerales;f_Nitrososphaeraceae;g_Candidatus Nitrososphaera