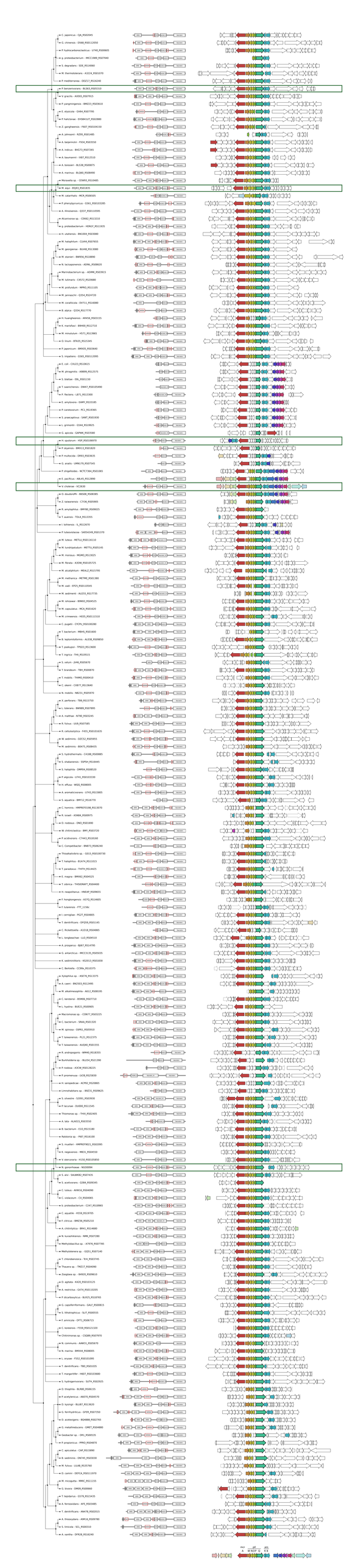
C. jejuensis - CJA_RS02045
G. cinnerea - DSM_RS01120
F. hydrothermalis/salsicia - ST40_RS00665
g. proteobacterium - IMCC1989_RS07940
S. degradans - SDE_RS14060
M. thermoalcalara - A3224_RS03370
P. mediterranea - OD217_RS16240
P. benzeniivorans - BL563_RS05310
V. gracilis - AX665_RS07915
P. yangmingensis - BWZ23_RS03610
E. elyicola - GI464_RS07795
F. hanchiae - DYD84107_RS03985
Z. galactanivorans - FB37_RS02410
A. johnsonii - RZ95_RS01485
A. baliarisicii - FB34_RS03550
A. indicus - BVG73_RS07295
A. baumannii - IX87_RS12510
A. bolzanii - BL538_RS08875
A. murinus - BLQ60_RS08490
Moraxella sp. - CEW93_RS10485
M. myx? - BSJ81_RS01835
M. caseilyticus - MCA_RS00505
P. phenylpyruvicus - GS61_RS03105
A. stirosiensis - Q337_RS01105
Alcanivorax sp. - CEK62_RS13210
g. proteobacterium - HDN1F_RS11935
H. utahensis - BN1006_RS03080
M. halophilum - CUI44_RS07655
M. georgiense - BU48_RS13080
M. stanieri - BN956_RS18890
N. tocuyoensis - ADP6_RS08020
Marinobacterium sp. - AOP6_RS03915
M. luhmsis - CAS72_RS20680
M. profundum - MP80_RS11105
M. jannaschii - Q354_RS24720
M. cerasiicola - DV711_RS16080
B. algica - Q334_RS13770
H. huanghenensis - AR456_RS03155
K. marisflavi - BBH00_RS12710
H. mirabilum - H571_RS13965
O. trunin - BTA35_RS25345
P. piscium - BRR35_RS03640
S. impatiens - GS65_RS01120995
E. coli - CXG23_RS10615
M. phragmitis - AW89_RS12575
S. blattae - EBI_RS01150
T. saanichensis - DW47_RS02105490
P. flectens - LB72_RS13300
E. amylovora - EAMY_RS33185
P. carotovorum - PC1_RS19365
S. preacopticus - SA67_RS01930
L. pyrimonti - GI44_RS19925
G. aplicola - GAPWK_RS01560
N. spumarum - HGP_RS01180970
P. stipecola - BWX13_RS01820
P. multiseda - DR93_RS03635
G. anatis - UMN179_RS07545
P. shigelloides - NCTC7364_RS01065
E. pacifica - ABL45_RS12890
V. cholerae - VC2630
G. duodenofll - B9Z66_RS06385
Z. tolerans - CTO9_RS05965
H. amylolytica - BM590_RS09025
T. auensis - TDLA_RS13355
I. loihiensis - IL_RS12670
f. tuberostaccus - SAD54249_RS01370
M. lutea - METLI_RS01161110
M. lundriplanaium - METTU_RS05145
M. morosus - MGMO_RS13025
M. filirata - A3OW_RS01057525
M. arcuiphilum - MEALZ_RS15795
M. methanica - METME_RS01380
M. vad - EP25_RS01110545
M. sedimenti - AU255_RS17735
M. shizawai - BBW03_RS04525
M. capsulatus - MCA_RS01620
M. crimeensis - HO35_RS01111510
C. pugetii - CYCPU_RS01002980
T. bacterium - MBHS_RS01600
B. hoptonishiimins - AL038_RS09050
T. pseudgut - TPSZ1_RS13690
T. nigrica - TNA_RS10915
S. odium - JV90_RS05670
T. brandeum - TBH_RS00870
T. mobilis - THIMO_RS00410
C. oleanii - CX837_RS13640
N. mobilis - NB231_RS09970
X. perfidiens - TB9_RS13750
L. tolerans - BM989_RS07895
A. halifaxi - N790_RS02145
UA_RS07585
R. cellulolyticus - F455_RS10165
M. sedimnis - OZC52_RS05955
M. sedimnis - B0475_RS08435
S. hydrothermalis - C4188_RS00885
S. shabaninsis - SSPSH_RS16845
S. halophila - DMP04_RS08520
P. algicola - LT41_RS10103330
H. effusa - WQQ_RS06005
A. aromaticivorans - GY43_RS13605
S. aquatica - BMY12_RS16770
C. hominis - HMPREF0198_RS13070
N. israeli - A5NB4_RS00975
O. nobilus - DNQ_RS01690
W. chitinilacolica - BMY_RS03720
P. acidivorans - C7443_RS18160
C. Competibacter - BN873_RS06240
Thiohalorhibrio sp. - G015_RS01000730
T. halophilus - B1A74_RS11015
T. pseudacu - TH7N_RS14425
E. magna - BKK62_RS04525
t. sibirica - TH5DHART_RS04400
N. neapolitanus - HNEAP_RS09655
f. hongkongensis - A370_RS14605
f. tularensis - FTT_1156c
l. cernilgae - PG2T_RS04605
T. denitrificans - DFQ59_RS01145
C. Rickettsiella - A1D18_RS04865
L. longbeachae - LLO_RS04510
a. pneumophila - BJEC_RS14795
G. antarctica - IMCC3135_RS05035
K. sedimnitoris - K52013_RS01830
C. Berkella - CCHNs_RS10375
Xylophilus sp. - XSE76_RS13375
A. caeni - BN2503_RS12495
M. alkalimesophila - A612_RS08195
C. tardaroi - BSM06_RS07710
L. hyalina - BUE23_RS00905
Macromonas sp. - CON57_RS05225
C. bacterium - SRAA_RS01320
M. spinosa - CAP61_RS05910
T. taiwanensis - FL21_RS12375
T. taiwanensis - AUQ40_RS01555
R. endropogonis - BM440_RS18355
Burkholderia sp. - BLU54_RS21390
P. nodosa - A3CW_RS01282525
P. promenusa - LV28_RS25830
H. lanpedicae - ACP42_RS20865
Limnohabitans sp. - 8NZ51_RS06625
S. sinuosa - S2091_RS03930
F. lacunae - DU000_RS11545
Thiomonas sp. - THIX_RS02405
A. lata - ALA015_RS03550
B. bacterium - E1O_RS15180
Ralstonia sp. - P8E7_RS16100
S. mueller - HMPREF9021_RS02095
K. vegevensis - ME31_RS04550
V. starcoryna - H15D_RS01095850
N. aurorinhabens - NCU00994
V. sinz - SAE28982_RS07435
S. acidiceram - Q384_RS00345
C. tubus - AW918_RS04090
C. violaceum - CV_RS04065
b. proteobacterium - C247_RS18985
C. aquatile - H559_RS19705
F. citricus - BM238_RS05210
A. chitinilytica - BR41_RS14680
N. hurakhinsis - NMK_RS07280
Methylotenera sp. - A7976_RS07785
Methylotenera sp. - GQ51_RS07140
T. chloridoxidans - S3V_RS03745
Thaurea sp. - TMZ7_RS04090
Zoogloea sp. - B4920_RS09610
O. agilata - KA39_RS10103125
A. restrictus - G47A_RS01102205
P. dicarboxylicus - BLR25_RS18765
G. capsiferriformans - GALF_RS00815
S. thiotrophicus - TLIT_RS00035
F. aromanica - DYTJ_RS06715
C. tomensis - Y559_RS01121320
Chitinimonas sp. - CSG89_RS07970
N. communis - AAR31_RS05670
N. marina - BM444_RS08085
L. oryzae - F552_RS10101095
T. denitrificans - TBD_RS01035
T. margaritifer - HI07_RS01639080
S. hydrogenivorans - SUTH_RS02925
O. thiophila - BUN80_RS06155
P. xylanilyticus - AAOTE_RS04570
O. kyongii - BU287_RS13620
G. flavihydrolyticus - GF09_RS07350
D. acetivorans - BO4888_RS02765
G. metallireducens - GMET_RS04880
Geobacter sp. - OR1_RS05535
P. propionicus - PPRO_RS04870
C. agricultus - CAP_RS15690
B. sidminis - ON745_RS03030
M. fulvus - ULA8_RS23760
O. carbinis - OIT14_RS11970
M. micrograta - MMC_RS11155
G. bovis - DM09_RS00660
T. tepidarius - GS79_RS15435
A. ferrooxidans - AFE_RS03485
T. denitrificans - AN478_RS02015
A. thiooxydans - AMK18_RS09780
S. limicola - SCL_RS00310
A. xantha - DFR28_RS16240
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C 0
gltG
C 0