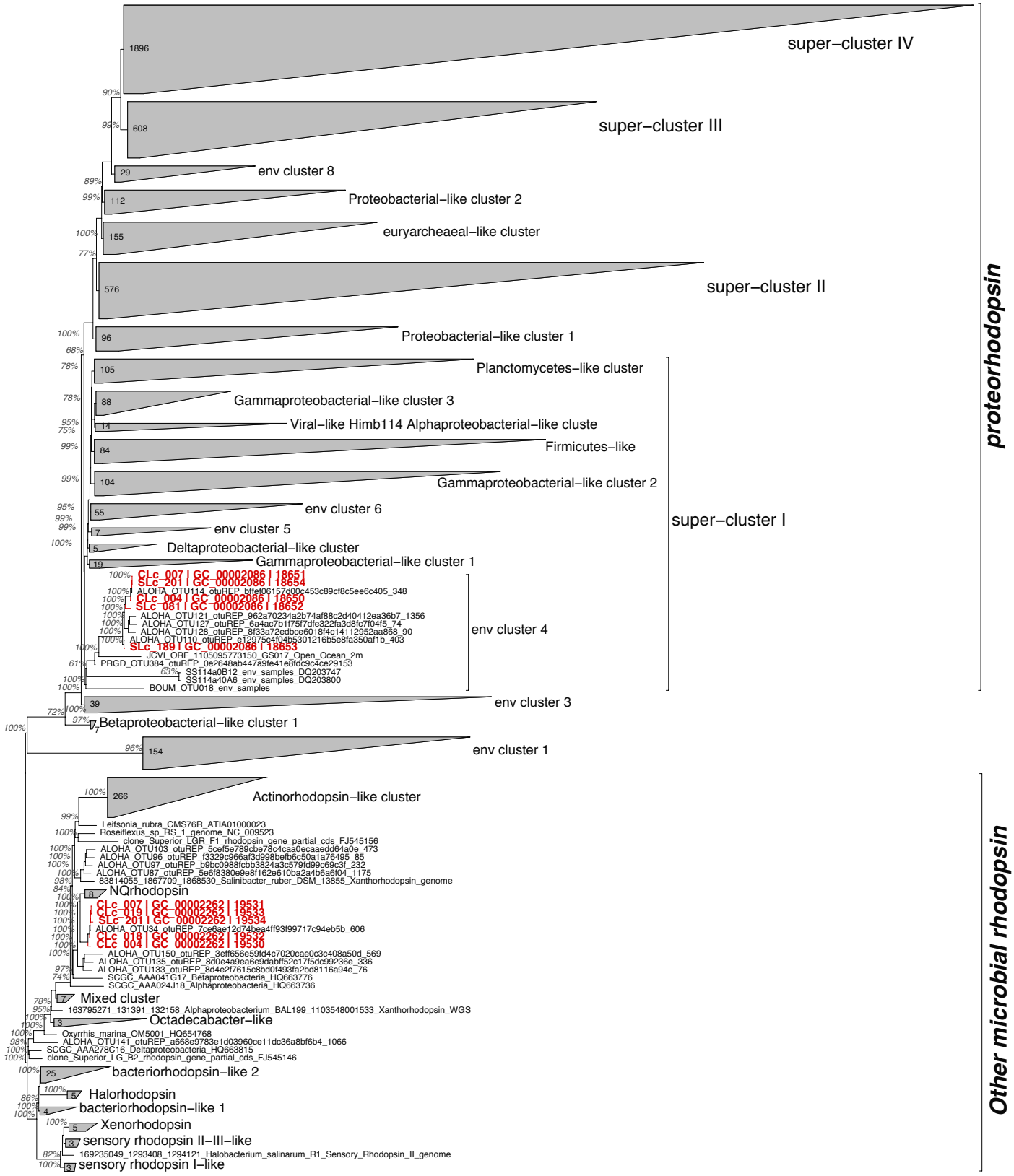
proteorhodopsin
super−cluster IV
1896
90%
99%
608
super−cluster III
29
89%
env cluster 8
99%
112
Proteobacterial−like cluster 2
100%
155
euryarcheaeal−like cluster
77%
576
super−cluster II
100%
96
Proteobacterial−like cluster 1
68%
78%
105
Planctomycetes−like cluster
78%
88
Gammaproteobacterial−like cluster 3
95%
75%
14
Viral−like Himb114 Alphaproteobacterial−like cluste
99%
84
Firmicutes−like
99%
104
Gammaproteobacterial−like cluster 2
95%
55
env cluster 6
99%
99%
7
env cluster 5
100%
5
Deltaproteobacterial−like cluster
19
Gammaproteobacterial−like cluster 1
super−cluster I
100%
CLc_007 | GC_00002086 | 18651
SLc_201 | GC_00002086 | 18654
100%
ALOHA_OTU114_otuREP_bffef06157d00c453c89cf8c5ee6c405_348
100%
CLc_004 | GC_00002086 | 18650
100%
SLc_081 | GC_00002086 | 18652
100%
ALOHA_OTU121_otuREP_962a70234a2b74af88c2d40412ea36b7_1356
100%
ALOHA_OTU127_otuREP_6a4ac7b1f75f7dfe322fa3d8fc7f04f5_74
100%
ALOHA_OTU128_otuREP_8f33a72edbce6018f4c14112952aa868_90
100%
ALOHA_OTU110_otuREP_e12975c4f04b5301216b5e8fa350af1b_403
100%
SLc_189 | GC_00002086 | 18653
JCVI_ORF_1105095773150_GS017_Open_Ocean_2m
61%
PRGD_OTU384_otuREP_0e2648ab447a9fe41e8fdc9c4ce29153
63%
SS114a0B12_env_samples_DQ203747
100%
SS114a40A6_env_samples_DQ203800
100%
BOUM_OTU018_env_samples
env cluster 4
72%
100%
39
env cluster 3
97%
7
Betaproteobacterial−like cluster 1
100%
96%
154
env cluster 1
Other microbial rhodopsin
100%
266
Actinorhodopsin−like cluster
99%
Leifsonia_rubra_CMS76R_ATIA01000023
100%
Roseiflexus_sp_RS_1_genome_NC_009523
clone_Superior_LGR_F1_rhodopsin_gene_partial_cds_FJ545156
100%
ALOHA_OTU103_otuREP_5cef5e789cbe78c4caa0ecaaedd64a0e_473
100%
ALOHA_OTU96_otuREP_f3329c966af3d998befb6c50a1a76495_85
100%
ALOHA_OTU97_otuREP_b9bc0988fcbb3824a3c579fd99c69c3f_232
100%
ALOHA_OTU87_otuREP_5e6f8380e9e8f162e610ba2a4b6a6f04_1175
98%
83814055_1867709_1868530_Salinibacter_ruber_DSM_13855_Xanthorhodopsin_genome
84%
100%
8
NQrhodopsin
100%
CLc_007 | GC_00002262 | 19531
100%
CLc_019 | GC_00002262 | 19533
100%
SLc_201 | GC_00002262 | 19534
100%
ALOHA_OTU34_otuREP_7ce6ae12d74bea4ff93f99717c94eb5b_606
100%
CLc_018 | GC_00002262 | 19532
100%
CLc_004 | GC_00002262 | 19530
100%
ALOHA_OTU150_otuREP_3eff656e59fd4c7020cae0c3c408a50d_569
ALOHA_OTU135_otuREP_8d0e4a9ea6e9dabff52c17f5dc99236e_336
97%
ALOHA_OTU133_otuREP_8d4e2f7615c8bd0f493fa2bdf8116a94e_76
74%
SCGC_AAA041G17_Betaproteobacteria_HQ663776
SCGC_AAA024J18_Alphaproteobacteria_HQ663736
78%
7
Mixed cluster
95%
163795271_131391_132158_Alphaproteobacterium_BAL199_1103548001533_Xanthorhodopsin_WGS
100%
3
Octadecabacter−like
100%
100%
Oxyrrhis_marina_OM5001_HQ654768
98%
ALOHA_OTU141_otuREP_a668e9783e1d03960ce11dc36a8bf6b4_1066
100%
SCGC_AAA278C16_Deltaproteobacteria_HQ663815
100%
clone_Superior_LG_B2_rhodopsin_gene_partial_cds_FJ545146
100%
25
bacteriorhodopsin−like 2
100%
5
Halorhodopsin
86%
100%
4
bacteriorhodopsin−like 1
100%
100%
5
Xenorhodopsin
3
sensory rhodopsin II−III−like
82%
169235049_1293408_1294121_Halobacterium_salinarum_R1_Sensory_Rhodopsin_II_genome
100%
3
sensory rhodopsin I−like