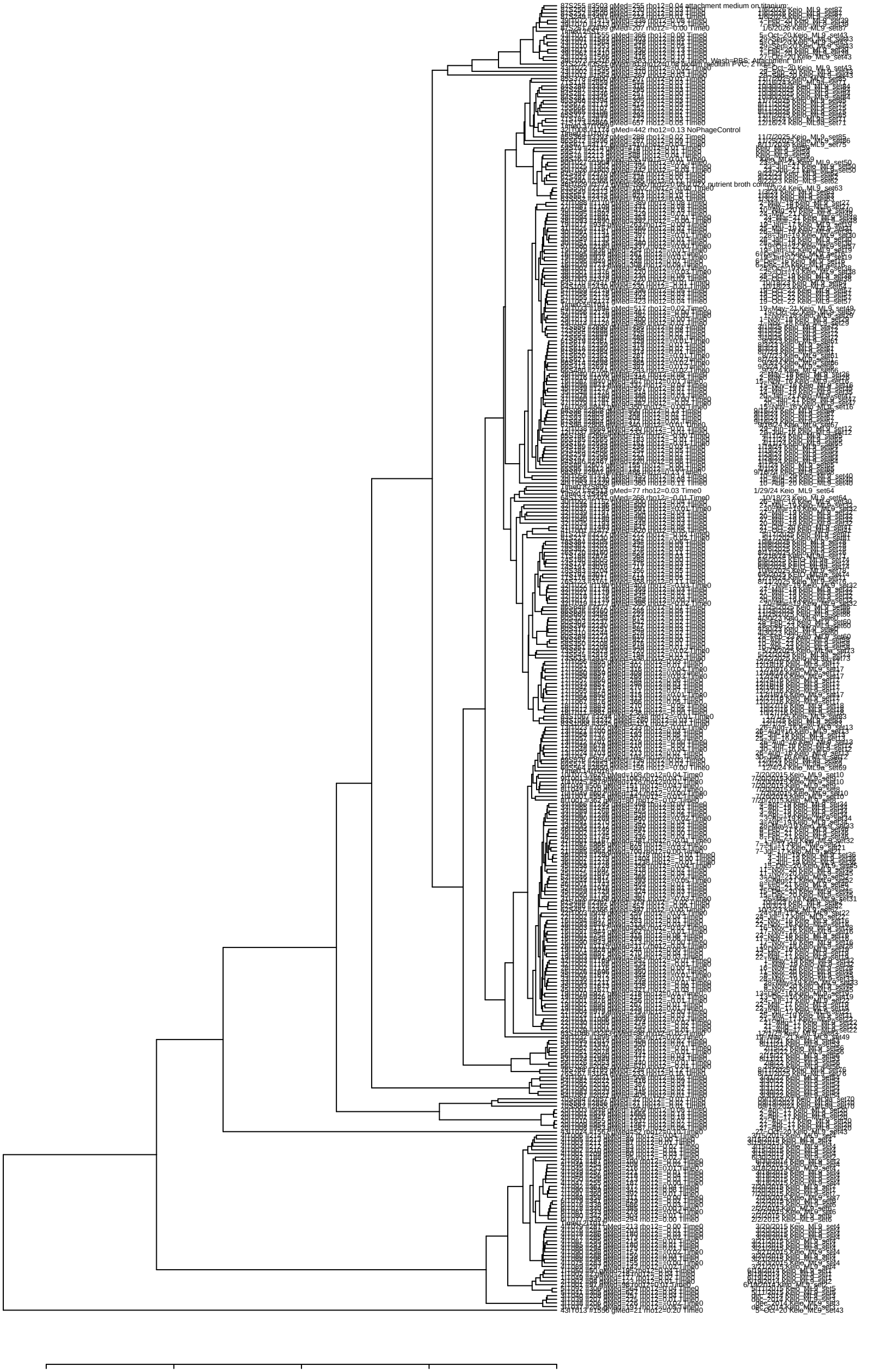
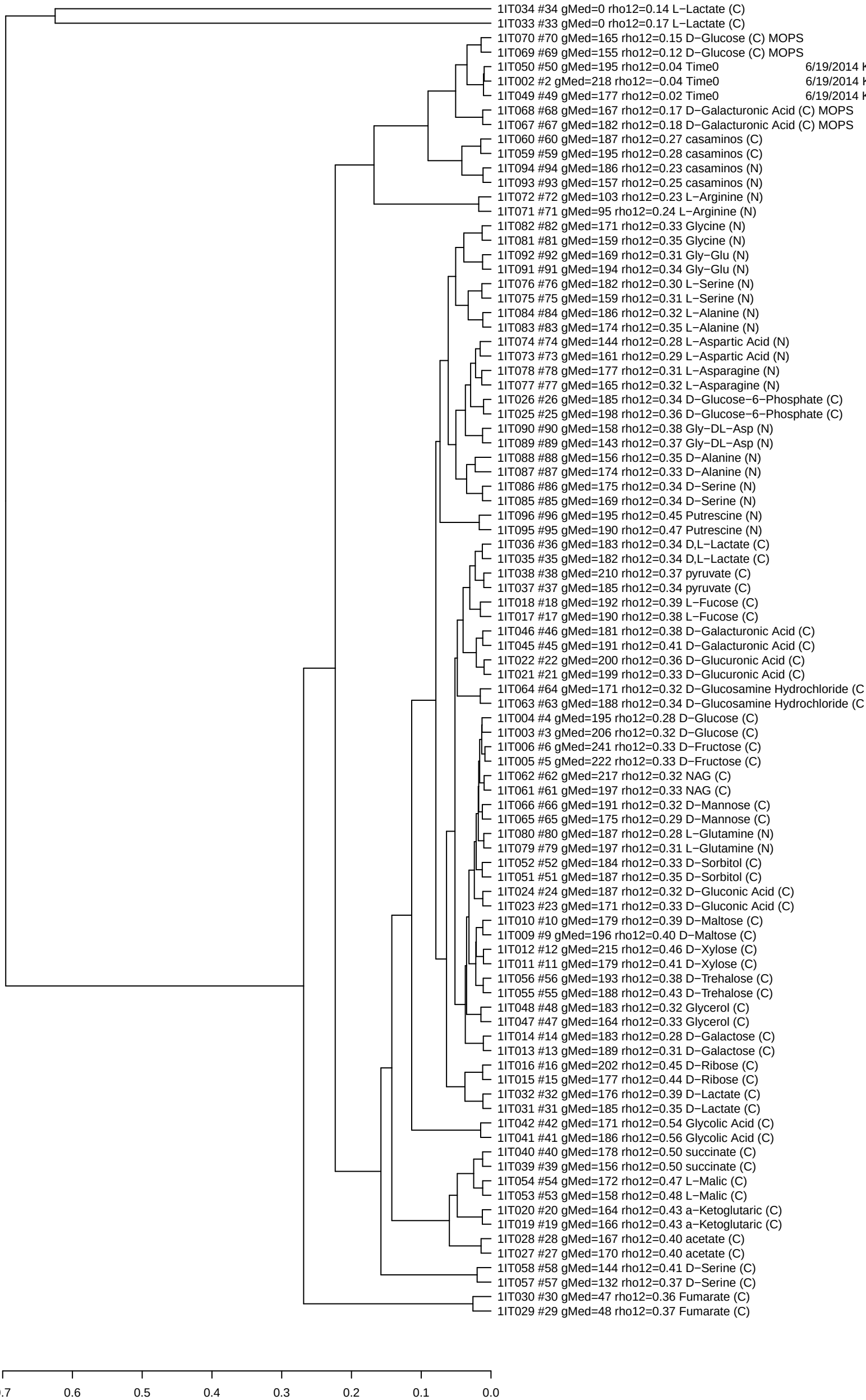
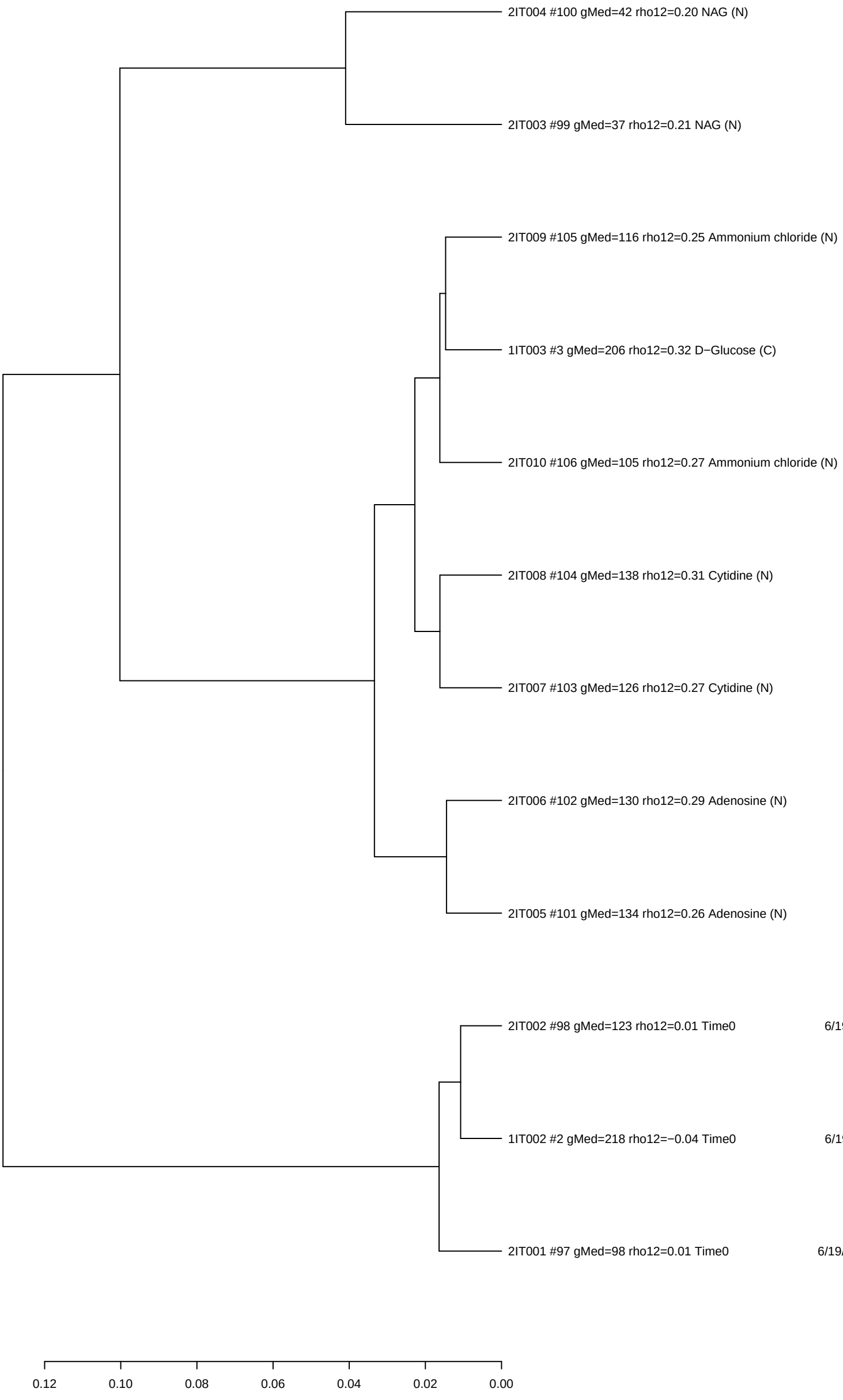
Time0 and similar samples
(clustered by log−count)



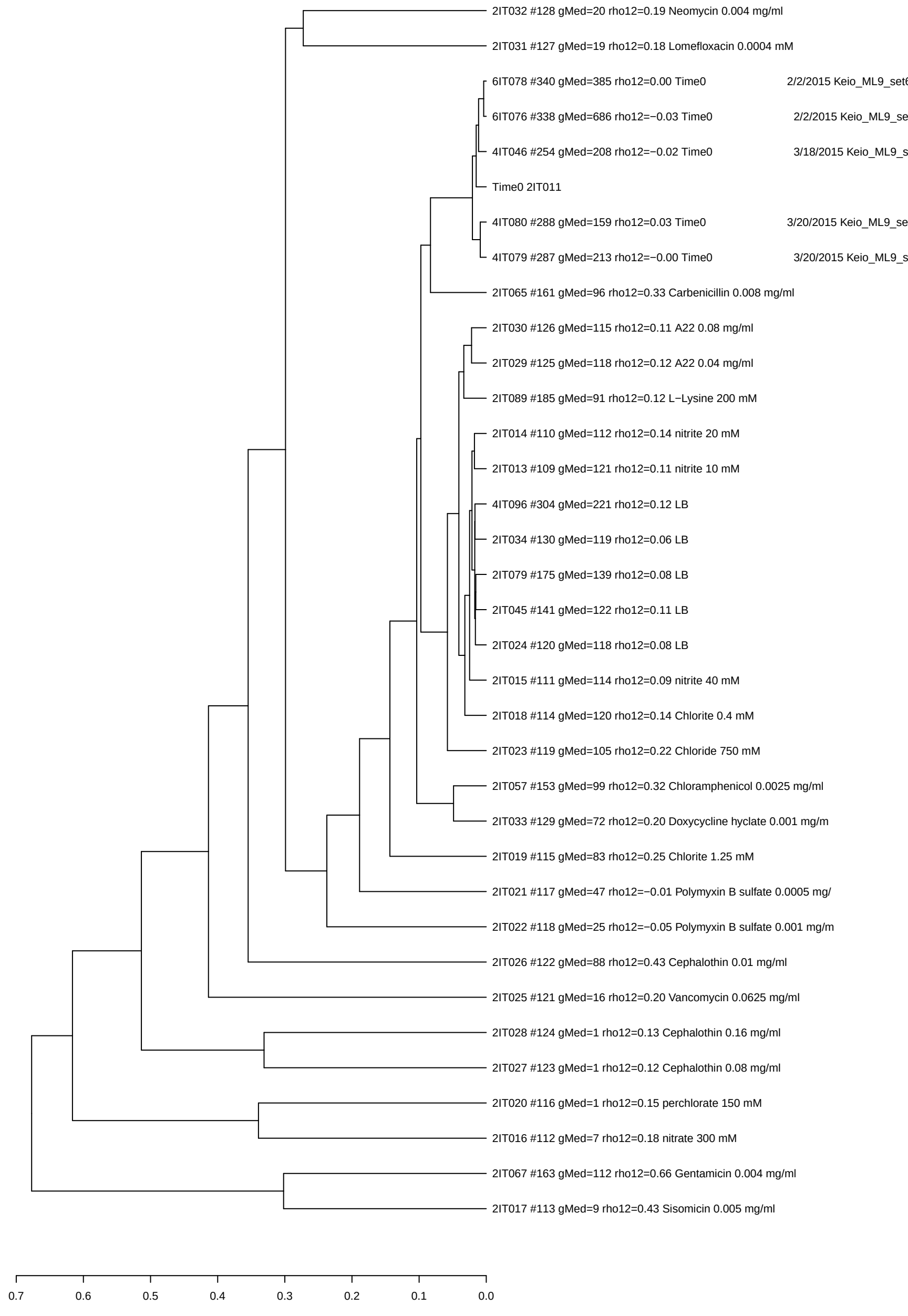
6/19/2014 Keio_ML9_set1 and similar samples (clustered by log−count)



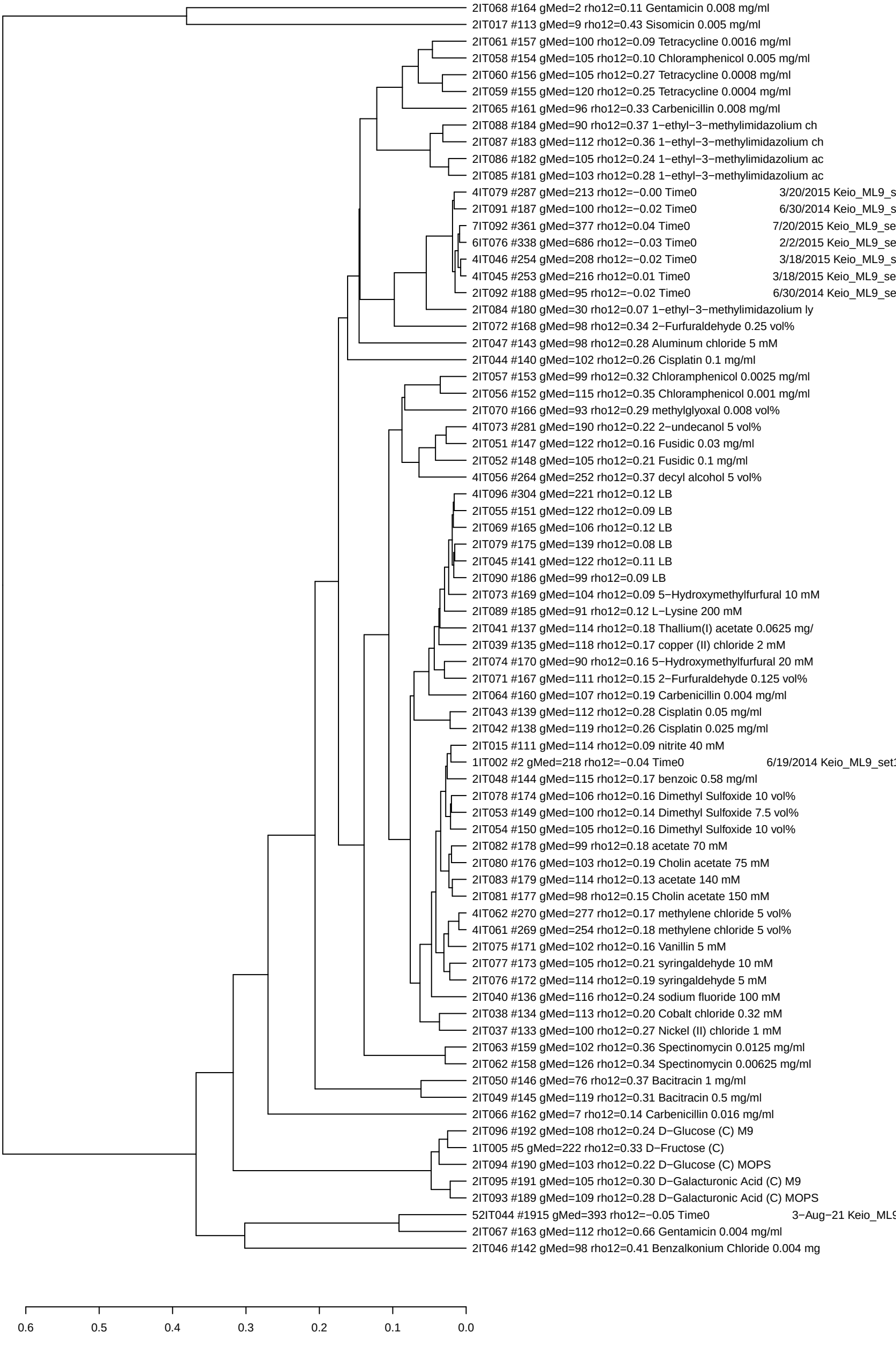
6/19/2014 Keio_ML9_set2 and similar samples (clustered by log−count)



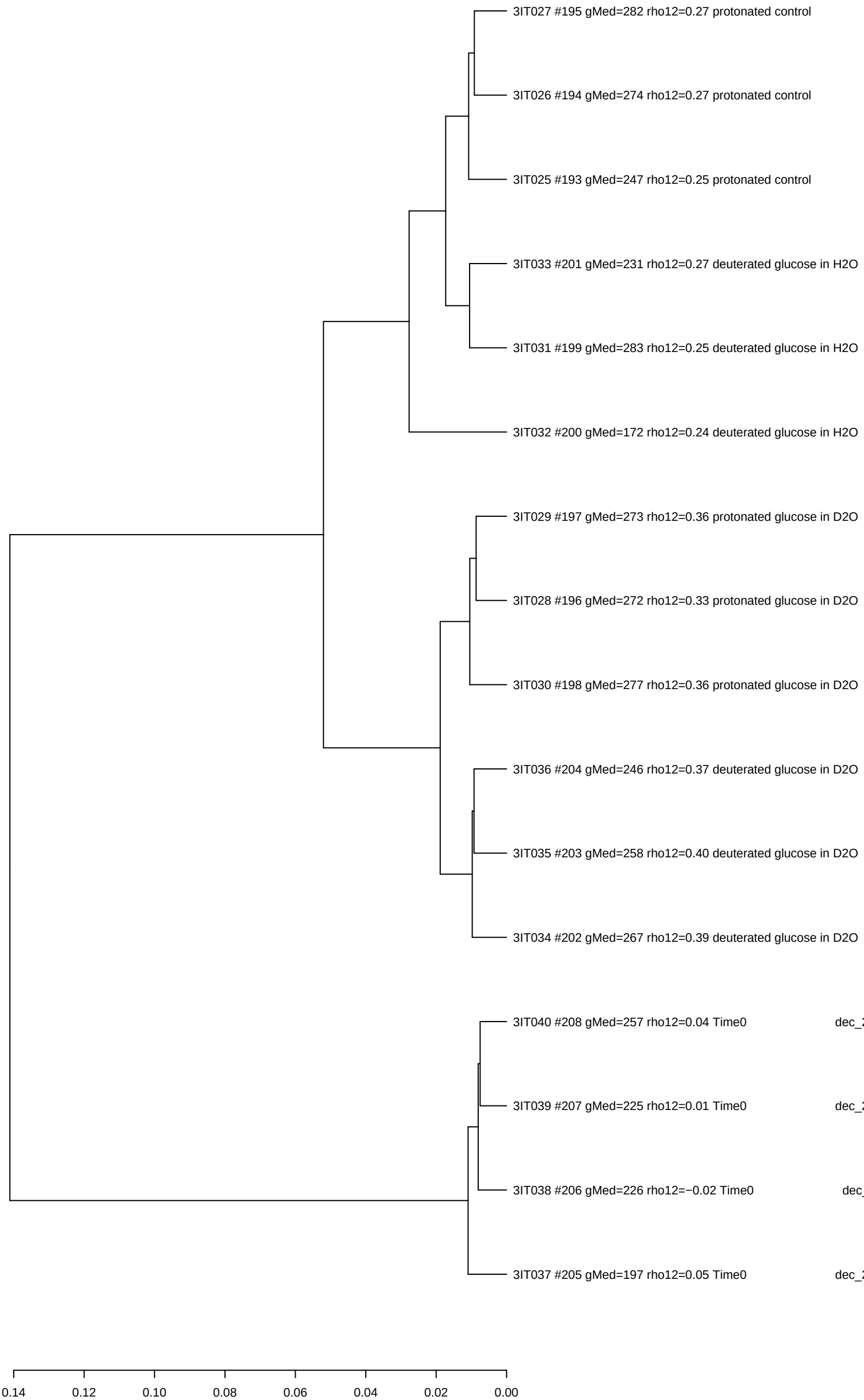
6/24/2014 Keio_ML9_set2 and similar samples (clustered by log−count)



6/30/2014 Keio_ML9_set2 and similar samples (clustered by log−count)



dec_2014 Keio_ML9_set3 and similar samples
(clustered by log−count)



3/15/2015 Keio_ML9_set4 and similar samples (clustered by log−count)

4IT014 #222 gMed=225 rho12=0.26 limonene 1.25 vol%
4IT013 #221 gMed=236 rho12=0.27 limonene 1.25 vol%
4IT012 #220 gMed=263 rho12=0.36 limonene 2.5 vol%
4IT011 #219 gMed=225 rho12=0.37 limonene 2.5 vol%
4IT008 #216 gMed=100 rho12=0.22 pinene 5 vol%
4IT007 #215 gMed=96 rho12=0.17 pinene 5 vol%
4IT040 #248 gMed=235 rho12=0.42 undecene 5 vol%
4IT039 #247 gMed=215 rho12=0.40 undecene 5 vol%
4IT042 #250 gMed=224 rho12=0.31 undecene 2.5 vol%
4IT041 #249 gMed=247 rho12=0.34 undecene 2.5 vol%
4IT010 #218 gMed=129 rho12=0.31 limonene 5 vol%
4IT009 #217 gMed=133 rho12=0.30 limonene 5 vol%
4IT024 #232 gMed=160 rho12=0.13 3−methyl−1−butanol 1.25 vol%
4IT023 #231 gMed=153 rho12=0.22 3−methyl−1−butanol 1.25 vol%
4IT016 #224 gMed=224 rho12=0.26 3−methyl−2−butenol 1.25 vol%
4IT015 #223 gMed=195 rho12=0.20 3−methyl−2−butenol 1.25 vol%
4IT022 #230 gMed=169 rho12=0.10 3−methyl−1−butanol 2.5 vol%
4IT021 #229 gMed=171 rho12=0.08 3−methyl−1−butanol 2.5 vol%
4IT048 #256 gMed=218 rho12=−0.04 Time0 3/18/2015 Keio_ML9_s
4IT046 #254 gMed=208 rho12=−0.02 Time0 3/18/2015 Keio_ML9_s
4IT049 #257 gMed=221 rho12=−0.01 Time0 3/18/2015 Keio_ML9_s
4IT050 #258 gMed=213 rho12=−0.03 Time0 3/18/2015 Keio_ML9_s
4IT006 #214 gMed=97 rho12=−0.04 Time0 3/15/2015 Keio_ML9_se
4IT005 #213 gMed=89 rho12=0.00 Time0 3/15/2015 Keio_ML9_set4
4IT003 #211 gMed=87 rho12=0.01 Time0 3/15/2015 Keio_ML9_set4
4IT004 #212 gMed=83 rho12=−0.02 Time0 3/15/2015 Keio_ML9_se
4IT002 #210 gMed=83 rho12=−0.01 Time0 3/15/2015 Keio_ML9_se
4IT001 #209 gMed=60 rho12=−0.03 Time0 3/15/2015 Keio_ML9_se
5IT092 #306 gMed=564 rho12=0.04 Time0 5/11/2015 Keio_ML9_se
5IT041 #305 gMed=627 rho12=0.04 Time0 5/11/2015 Keio_ML9_se
1IT049 #49 gMed=177 rho12=0.02 Time0 6/19/2014 Keio_ML9_set1
4IT028 #236 gMed=141 rho12=0.04 3−methyl−3−butenol 1.25 vol%
4IT027 #235 gMed=148 rho12=0.01 3−methyl−3−butenol 1.25 vol%
4IT036 #244 gMed=237 rho12=0.21 toluene 2.5 vol%
4IT035 #243 gMed=242 rho12=0.22 toluene 2.5 vol%
4IT026 #234 gMed=236 rho12=0.24 3−methyl−1−butanol 0.625 vol%
4IT025 #233 gMed=248 rho12=0.22 3−methyl−1−butanol 0.625 vol%
4IT018 #226 gMed=235 rho12=0.22 3−methyl−2−butenol 0.625 vol%
4IT017 #225 gMed=237 rho12=0.18 3−methyl−2−butenol 0.625 vol%
4IT038 #246 gMed=241 rho12=0.23 ethyl acetate 5 vol%
4IT037 #245 gMed=218 rho12=0.29 ethyl acetate 5 vol%
4IT044 #252 gMed=252 rho12=0.17 LB
4IT043 #251 gMed=234 rho12=0.14 LB
4IT058 #266 gMed=234 rho12=0.16 diethyl ether 5 vol%
4IT032 #240 gMed=233 rho12=0.20 3−methyl−3−butenol 0.31 vol%
4IT020 #228 gMed=244 rho12=0.15 3−methyl−2−butenol 0.31 vol%
4IT019 #227 gMed=238 rho12=0.15 3−methyl−2−butenol 0.31 vol%
4IT031 #239 gMed=241 rho12=0.18 3−methyl−3−butenol 0.31 vol%
4IT030 #238 gMed=225 rho12=0.19 3−methyl−3−butenol 0.625 vol%
4IT029 #237 gMed=255 rho12=0.21 3−methyl−3−butenol 0.625 vol%
4IT033 #241 gMed=1 rho12=0.10 toluene 5 vol%

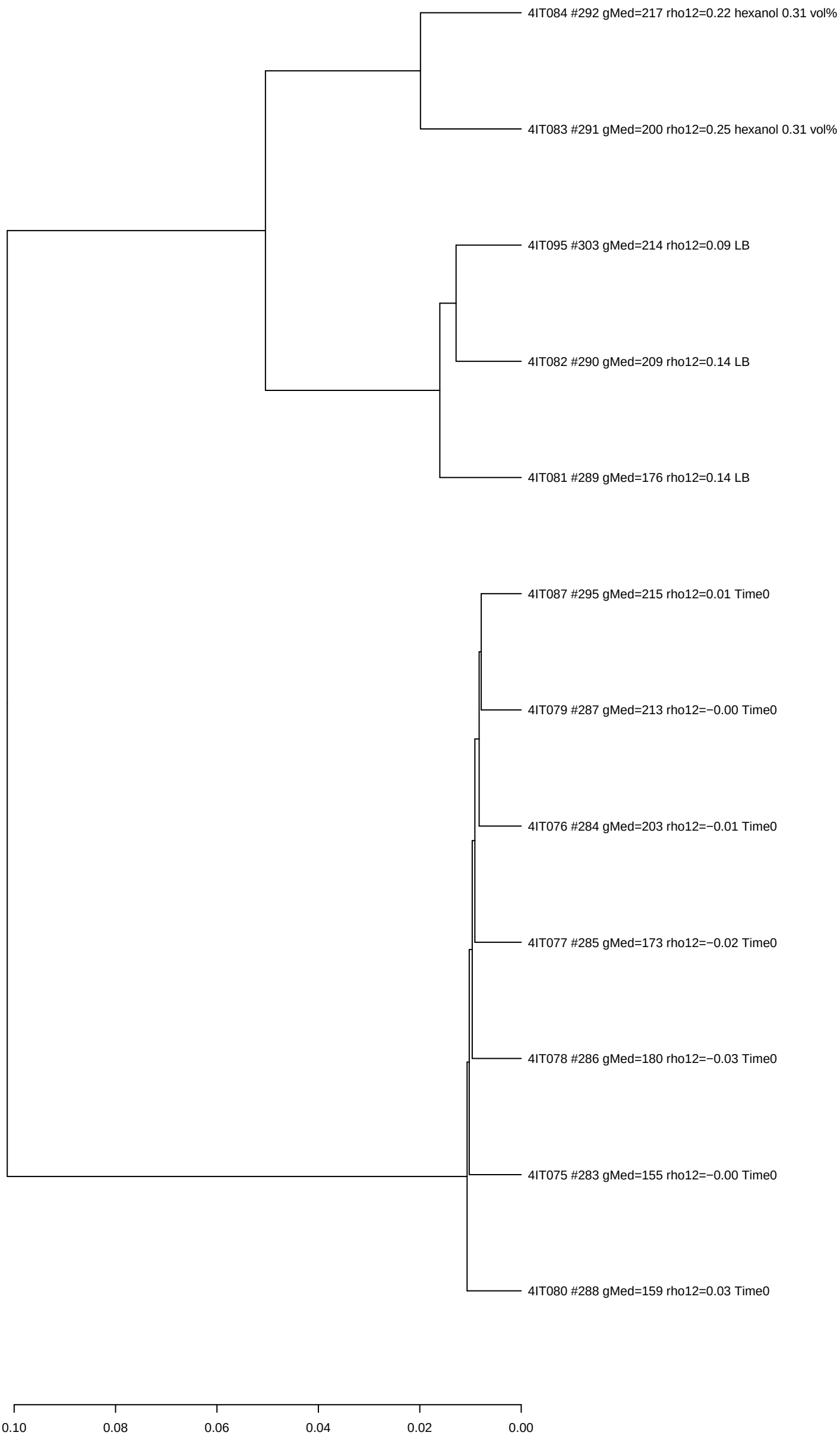
0.5 0.4 0.3 0.2 0.1 0.0

3/18/2015 Keio_ML9_set4 and similar samples (clustered by log−count)

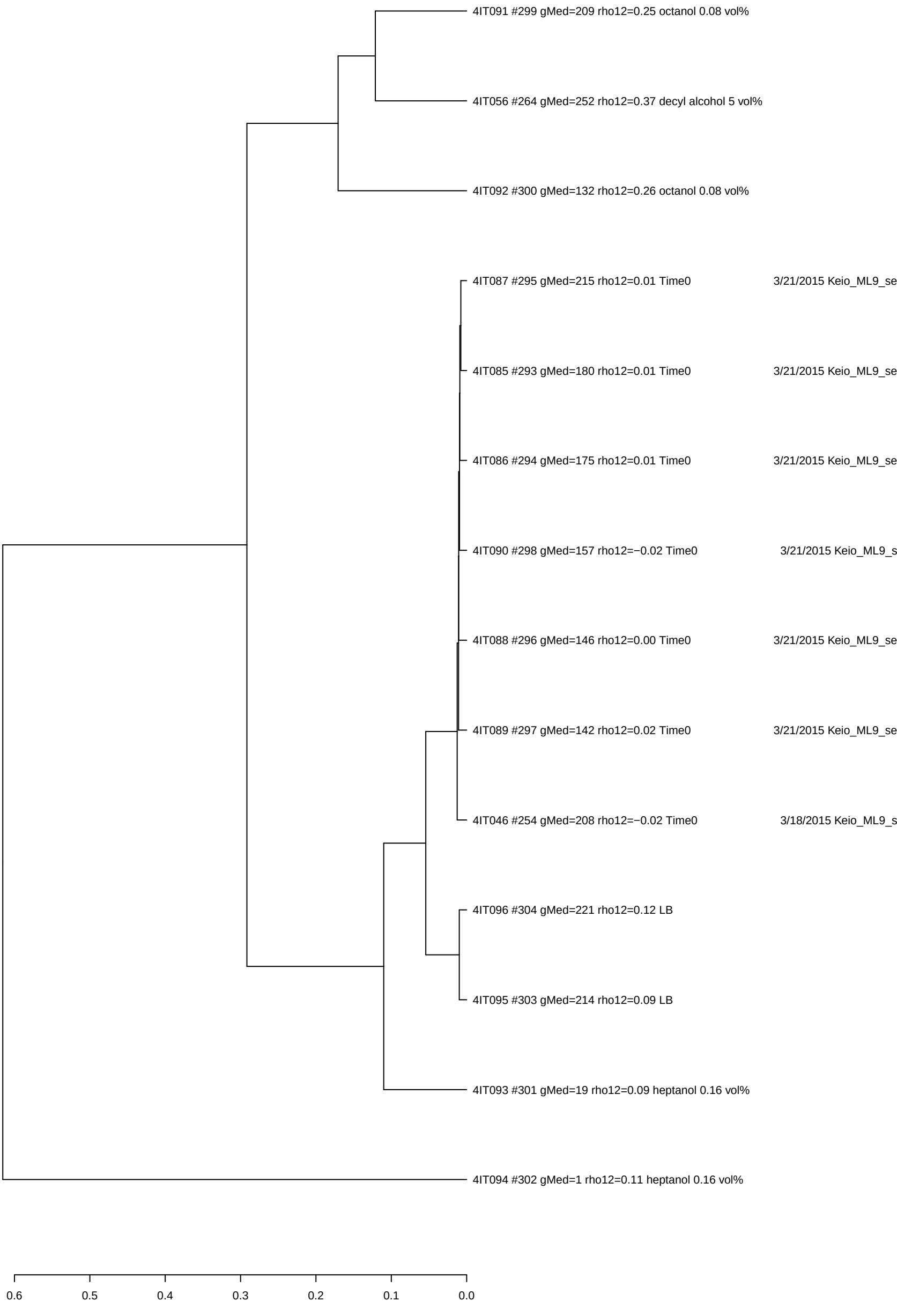
4IT066 #274 gMed=196 rho12=0.54 2,4−Dinitrophenol 2 mM
4IT065 #273 gMed=188 rho12=0.50 2,4−Dinitrophenol 2 mM
4IT056 #264 gMed=252 rho12=0.37 decyl alcohol 5 vol%
4IT055 #263 gMed=239 rho12=0.36 decyl alcohol 5 vol%
4IT072 #280 gMed=221 rho12=0.16 capsaicin 1 mM
4IT071 #279 gMed=206 rho12=0.15 capsaicin 1 mM
4IT069 #277 gMed=198 rho12=0.15 capsaicin 2 mM
4IT070 #278 gMed=216 rho12=0.22 capsaicin 2 mM
4IT064 #272 gMed=205 rho12=0.17 octane 5 vol%
4IT063 #271 gMed=230 rho12=0.22 octane 5 vol%
4IT074 #282 gMed=165 rho12=0.24 2−undecanol 5 vol%
4IT073 #281 gMed=190 rho12=0.22 2−undecanol 5 vol%
4IT060 #268 gMed=233 rho12=0.16 LB
4IT051 #259 gMed=241 rho12=0.17 dodecane 5 vol%
4IT059 #267 gMed=241 rho12=0.15 LB
4IT043 #251 gMed=234 rho12=0.14 LB
4IT052 #260 gMed=203 rho12=0.19 dodecane 5 vol%
4IT058 #266 gMed=234 rho12=0.16 diethyl ether 5 vol%
4IT057 #265 gMed=216 rho12=0.14 diethyl ether 5 vol%
4IT054 #262 gMed=201 rho12=0.16 hexadecane 5 vol%
4IT062 #270 gMed=277 rho12=0.17 methylene chloride 5 vol%
4IT061 #269 gMed=254 rho12=0.18 methylene chloride 5 vol%
4IT068 #276 gMed=182 rho12=0.25 2,4−Dinitrophenol 1 mM
4IT067 #275 gMed=213 rho12=0.25 2,4−Dinitrophenol 1 mM
4IT046 #254 gMed=208 rho12=−0.02 Time0 3/18/2015 Keio_ML9_s
4IT045 #253 gMed=216 rho12=0.01 Time0 3/18/2015 Keio_ML9_se
4IT049 #257 gMed=221 rho12=−0.01 Time0 3/18/2015 Keio_ML9_s
4IT048 #256 gMed=218 rho12=−0.04 Time0 3/18/2015 Keio_ML9_s
4IT050 #258 gMed=213 rho12=−0.03 Time0 3/18/2015 Keio_ML9_s
4IT047 #255 gMed=187 rho12=−0.00 Time0 3/18/2015 Keio_ML9_s

0.12 0.10 0.08 0.06 0.04 0.02 0.00

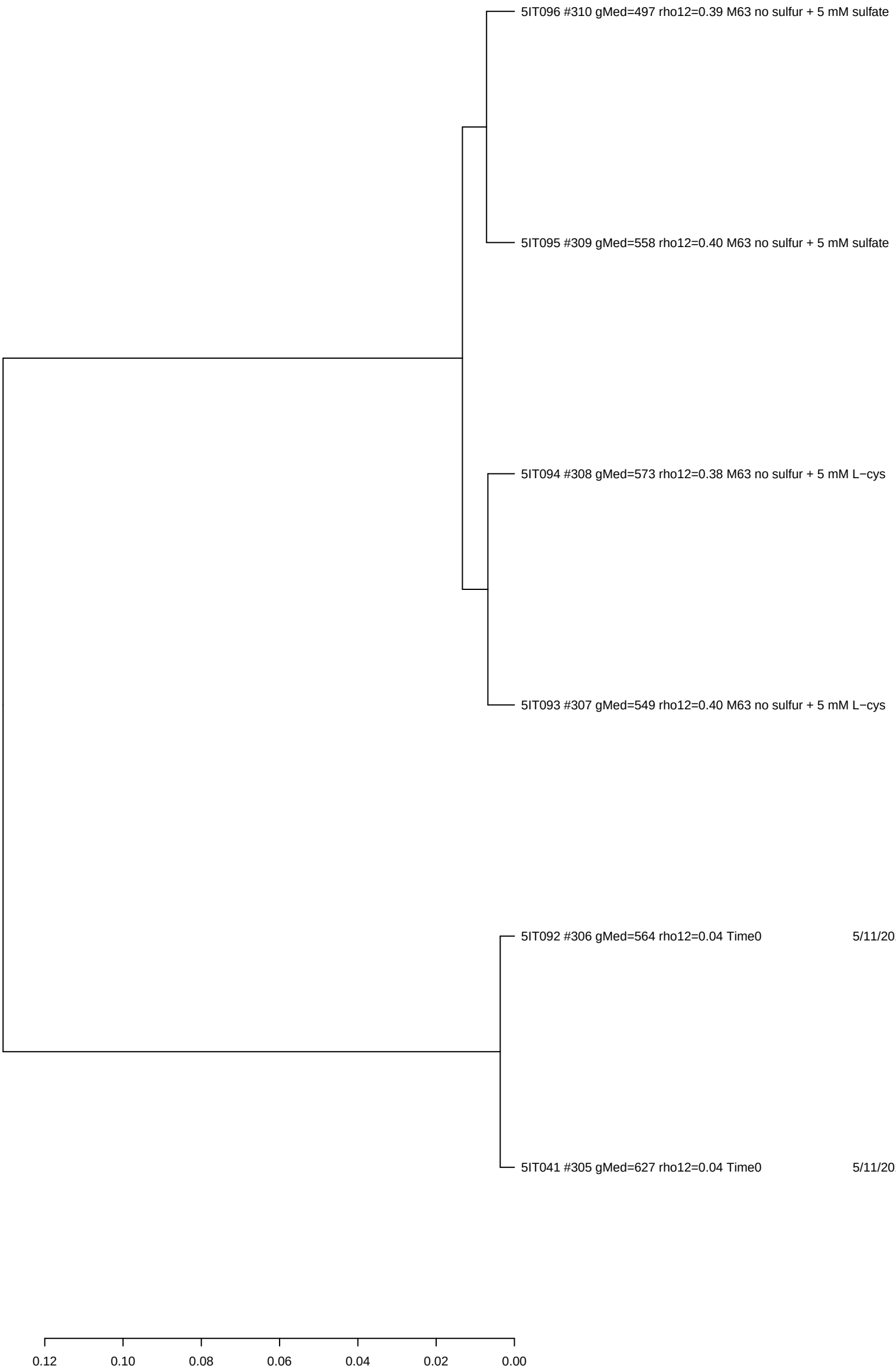
3/20/2015 Keio_ML9_set4 and similar samples (clustered by log−count)



3/21/2015 Keio_ML9_set4 and similar samples (clustered by log−count)



5/11/2015 Keio_ML9_set5 and similar samples (clustered by log−count)

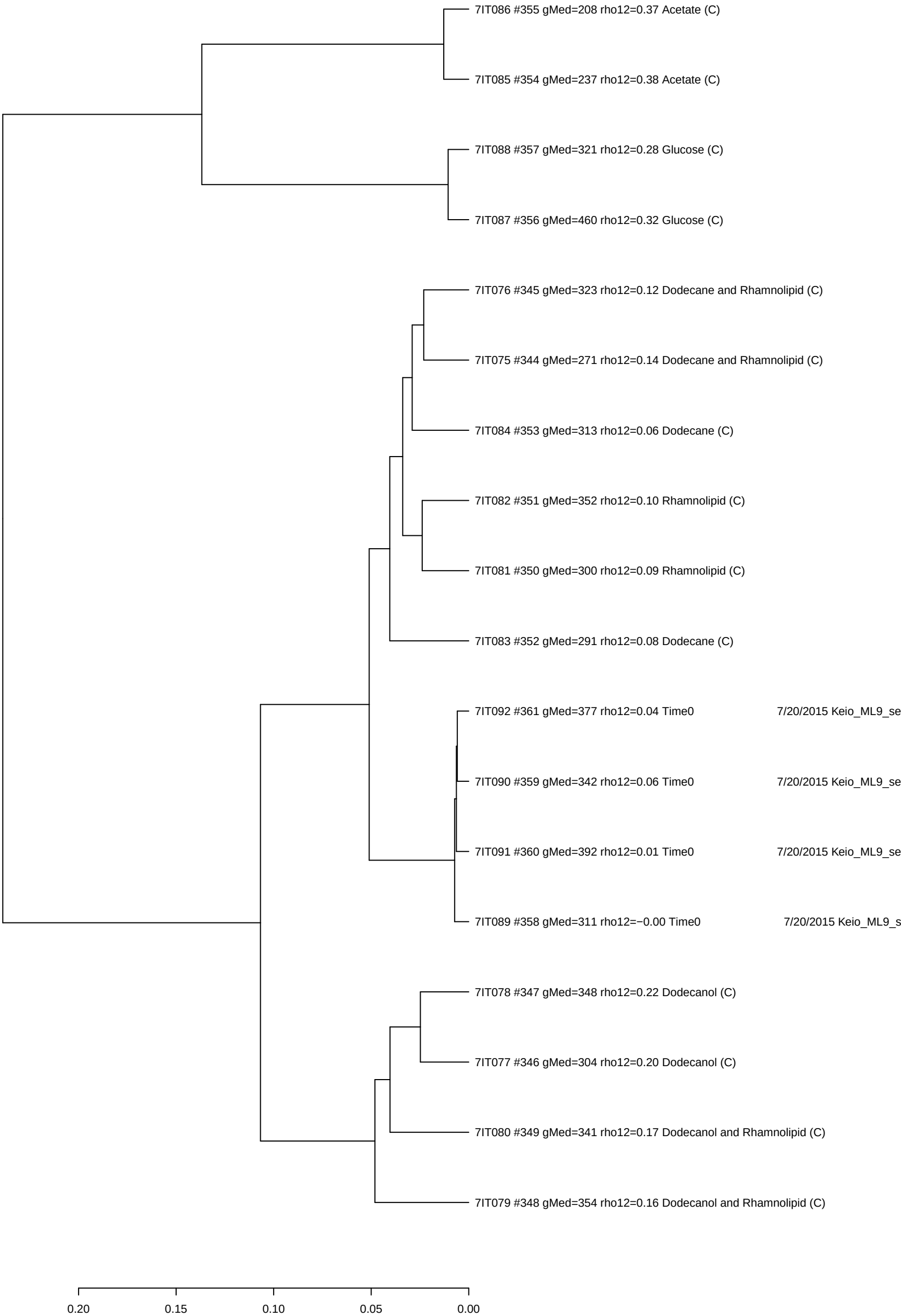


2/2/2015 Keio_ML9_set6 and similar samples (clustered by log−count)

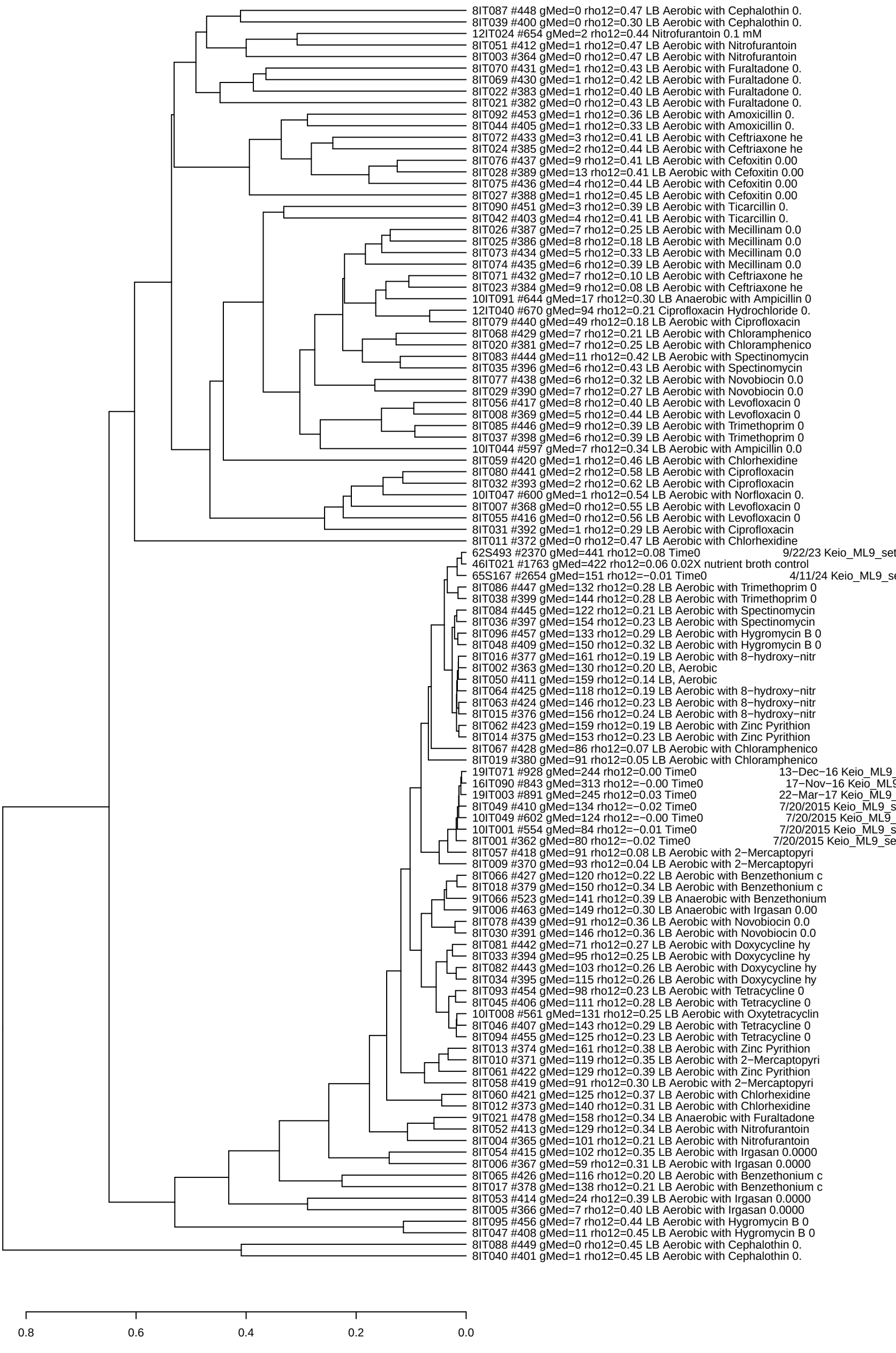
6IT079 #341 gMed=429 rho12=−0.02 Time0 2/2/2015 Keio_ML9_se
6IT076 #338 gMed=686 rho12=−0.03 Time0 2/2/2015 Keio_ML9_se
6IT078 #340 gMed=385 rho12=0.00 Time0 2/2/2015 Keio_ML9_set6
6IT081 #343 gMed=278 rho12=−0.04 Time0 2/2/2015 Keio_ML9_se
6IT080 #342 gMed=304 rho12=0.01 Time0 2/2/2015 Keio_ML9_set6
6IT077 #339 gMed=294 rho12=0.00 Time0 2/2/2015 Keio_ML9_set6
4IT077 #285 gMed=173 rho12=−0.02 Time0 3/20/2015 Keio_ML9_s
6IT049 #311 gMed=577 rho12=0.49 Nalidixic 0.006 mg/ml
6IT052 #314 gMed=168 rho12=0.34 Phosphomycin 0.001 mg/ml
6IT051 #313 gMed=261 rho12=0.45 Phosphomycin 0.0005 mg/ml
6IT053 #315 gMed=102 rho12=0.45 Phosphomycin 0.002 mg/ml
6IT074 #336 gMed=456 rho12=0.22 inner cut, LB soft agar motili
6IT073 #335 gMed=533 rho12=0.28 inner cut, LB soft agar motili
6IT072 #334 gMed=299 rho12=0.24 inner cut, LB soft agar motili
6IT067 #329 gMed=392 rho12=0.26 LB pH8
6IT066 #328 gMed=493 rho12=0.30 LB pH8
6IT065 #327 gMed=467 rho12=0.30 LB pH8
6IT063 #325 gMed=802 rho12=0.33 LB pH7
6IT062 #324 gMed=902 rho12=0.32 LB pH7
6IT064 #326 gMed=660 rho12=0.30 LB pH7
6IT055 #317 gMed=438 rho12=0.28 LB
6IT061 #323 gMed=664 rho12=0.33 LB pH6
6IT059 #321 gMed=462 rho12=0.29 LB pH6
6IT060 #322 gMed=354 rho12=0.29 LB pH6
6IT058 #320 gMed=368 rho12=0.35 LB pH5
6IT057 #319 gMed=352 rho12=0.39 LB pH5
6IT056 #318 gMed=386 rho12=0.36 LB pH5
6IT054 #316 gMed=534 rho12=0.35 D−Cycloserine 0.1 mg/ml
6IT075 #337 gMed=370 rho12=0.21 inner cut, LB soft agar motili
6IT070 #332 gMed=219 rho12=0.24 outer cut, LB soft agar motili
6IT068 #330 gMed=180 rho12=0.36 outer cut, LB soft agar motili
6IT071 #333 gMed=219 rho12=0.21 outer cut, LB soft agar motili
6IT069 #331 gMed=135 rho12=0.33 outer cut, LB soft agar motili
13IT015 #694 gMed=243 rho12=0.35 Nalidixic 0.06 mM
6IT050 #312 gMed=763 rho12=0.28 Benzethonium chloride 0.0125 m

0.30 0.25 0.20 0.15 0.10 0.05 0.00

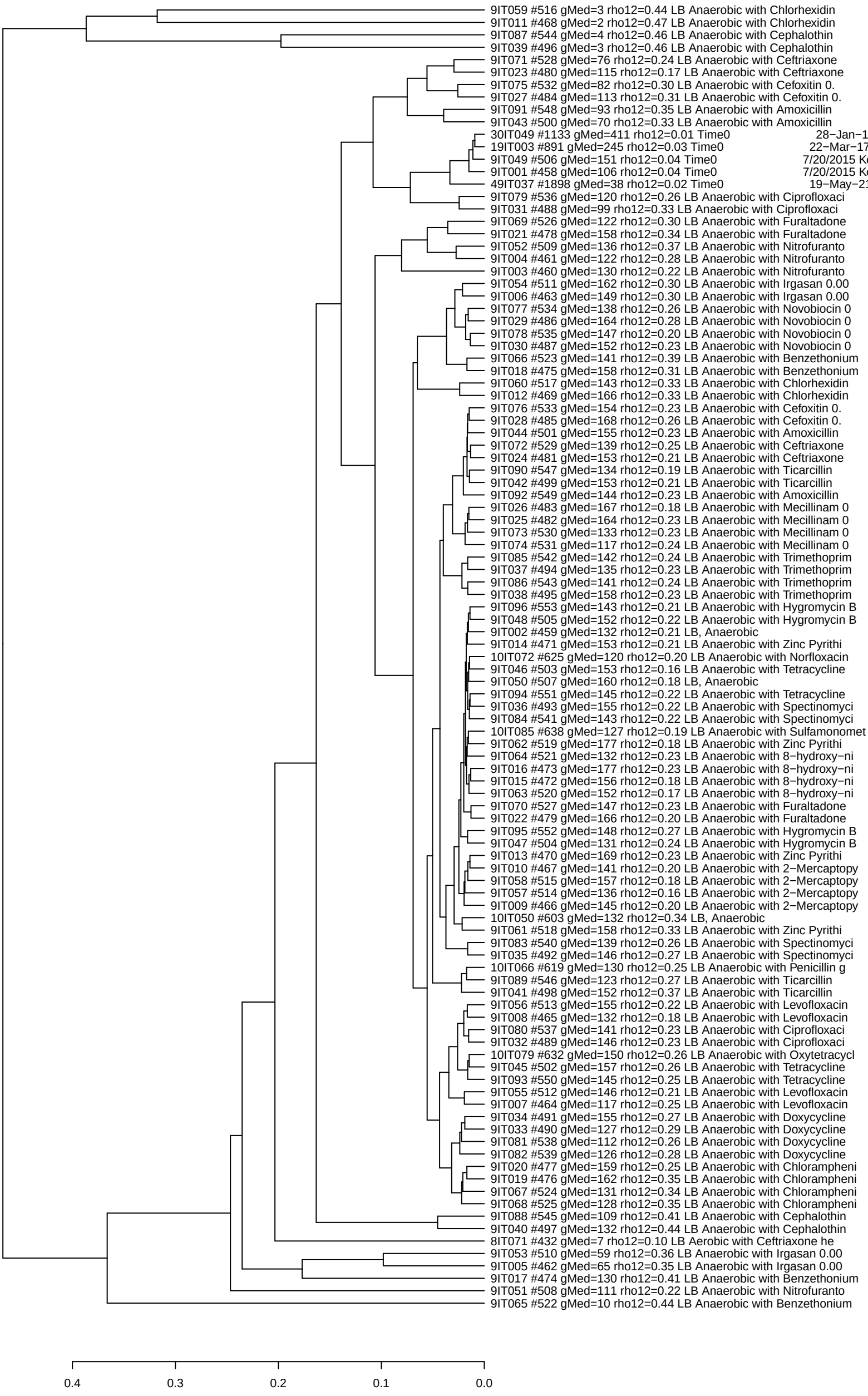
7/20/2015 Keio_ML9_set7 and similar samples (clustered by log−count)



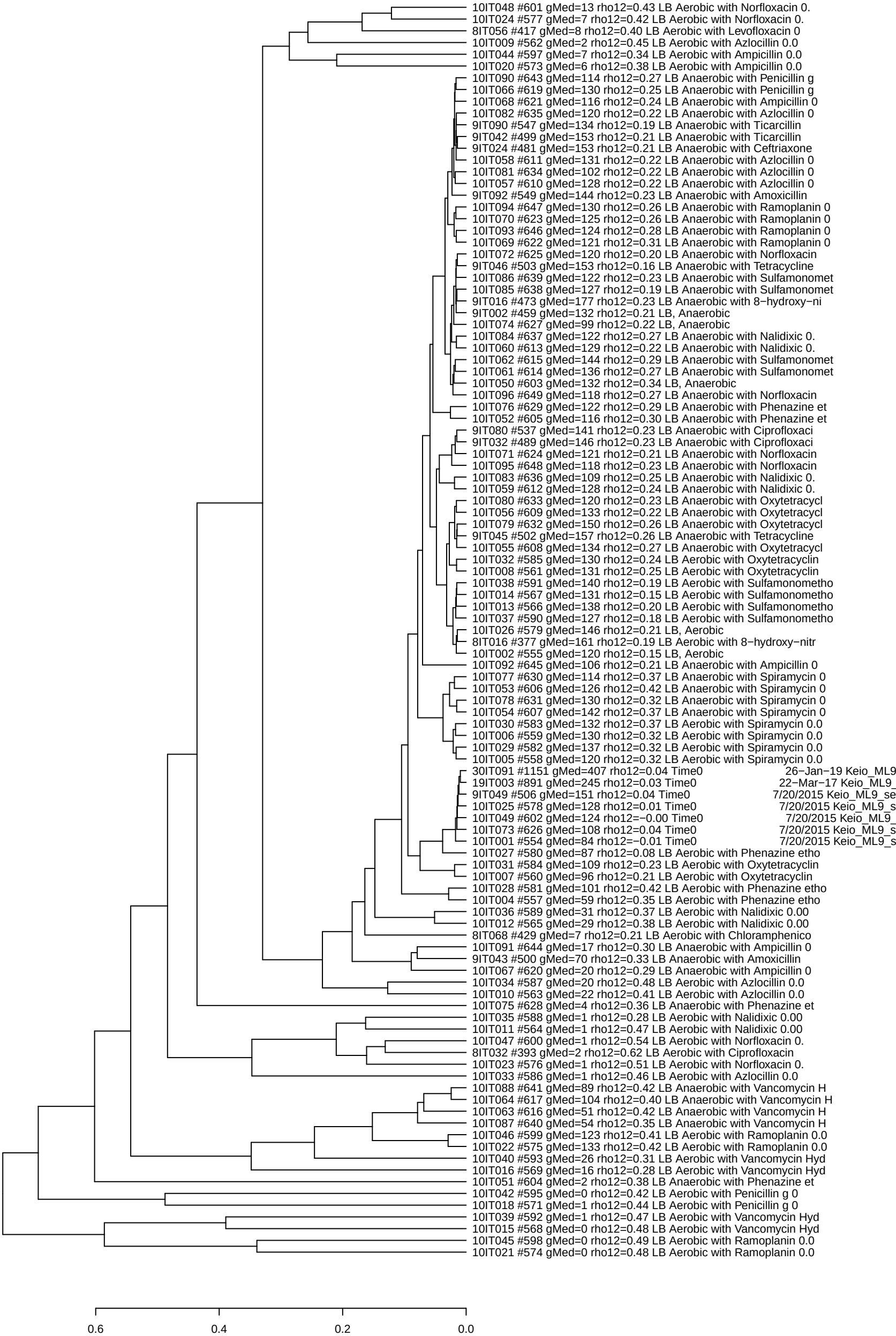
7/20/2015 Keio_ML9_set8 and similar samples (clustered by log−count)



7/20/2015 Keio_ML9_set9 and similar samples (clustered by log−count)



7/20/2015 Keio_ML9_set10 and similar samples (clustered by log−count)



1−Jun−16 Keio_ML9_set11 and similar samples (clustered by log−count)

11IT073 #652 gMed=371 rho12=0.05 P2 − low−dye sorted population

11IT072 #651 gMed=436 rho12=0.05 P1 − High−dye sorted populatio

32IT008 #1174 gMed=442 rho12=0.13 NoPhageControl

Time0 11IT071

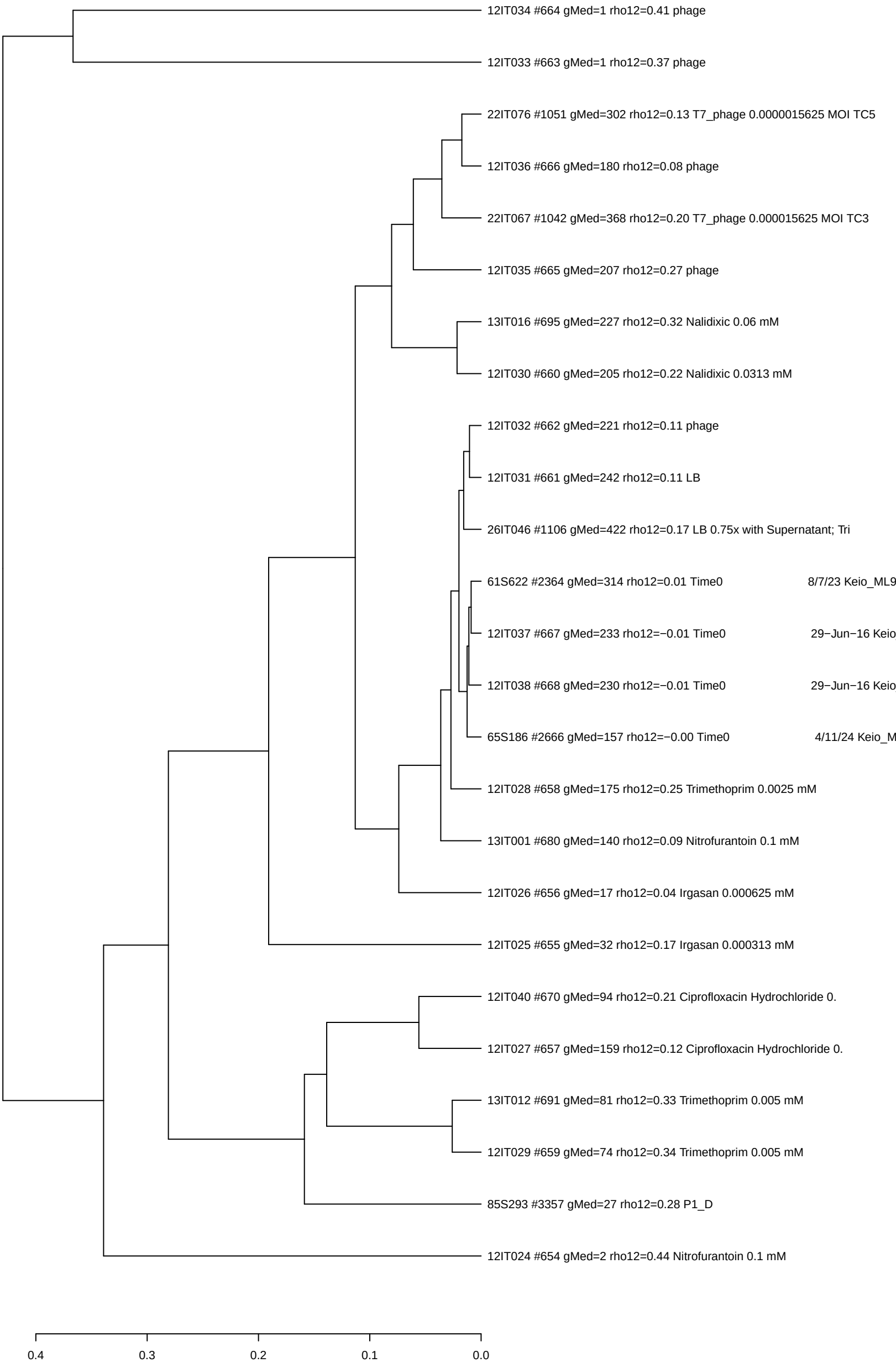
71S176 #2871 gMed=619 rho12=0.05 Time0

12/16/24 Keio_ML9a_s

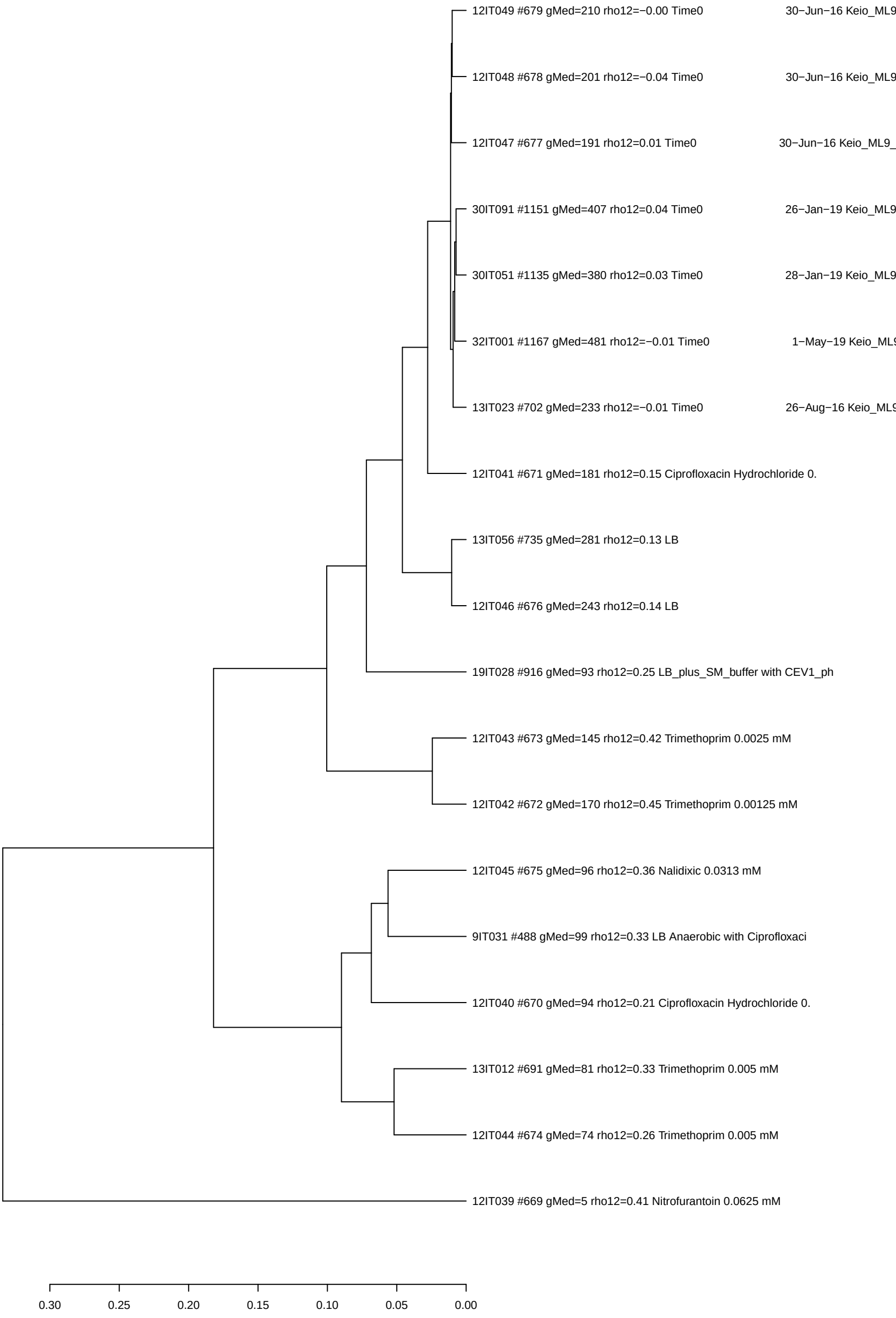
11IT074 #653 gMed=355 rho12=0.03 P3 − lowest−dye sorted populat

0.04 0.03 0.02 0.01 0.00

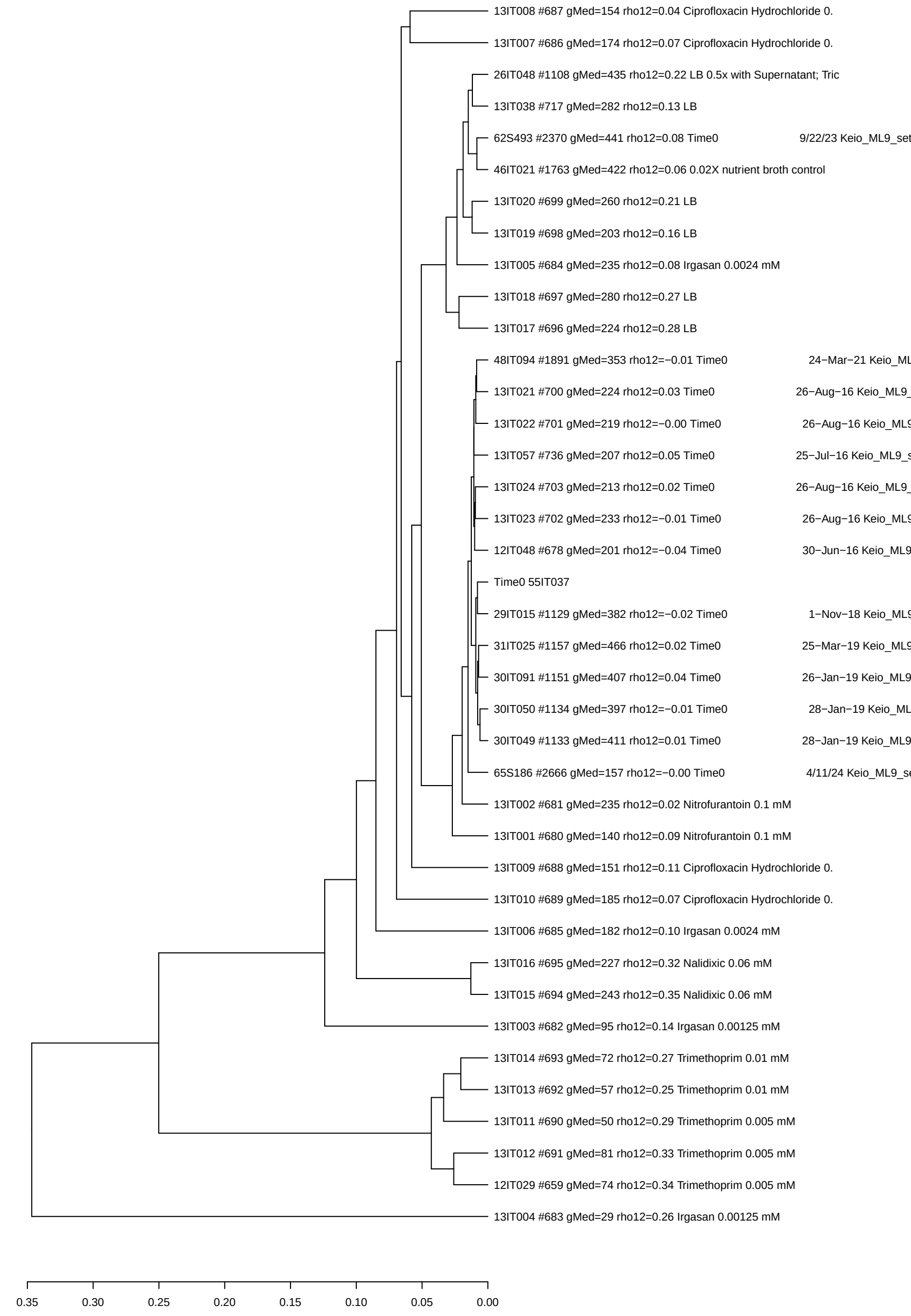
29−Jun−16 Keio_ML9_set12 and similar samples
(clustered by log−count)



30−Jun−16 Keio_ML9_set12 and similar samples (clustered by log−count)



26−Aug−16 Keio_ML9_set13 and similar samples (clustered by log−count)

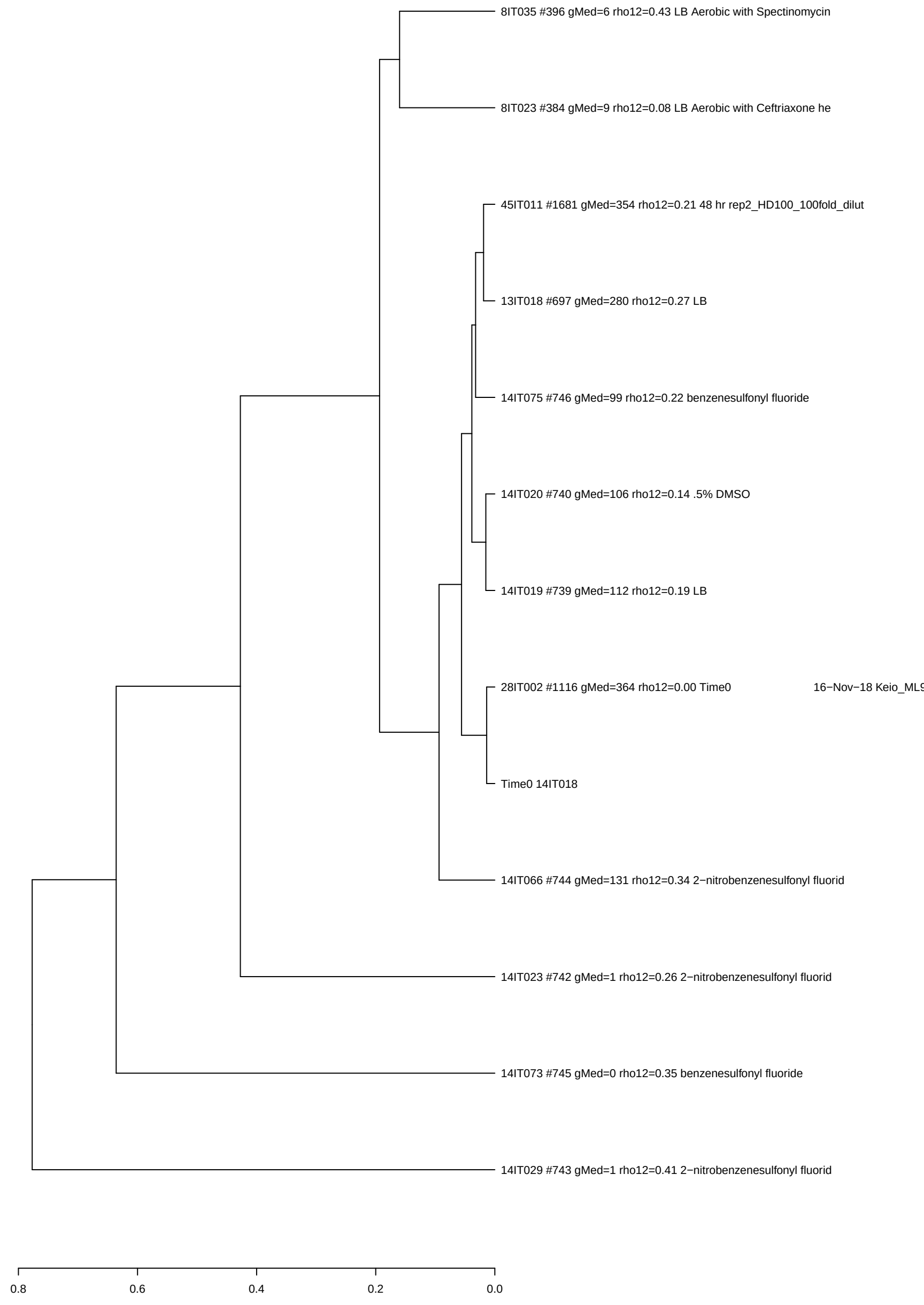


25−Jul−16 Keio_ML9_set13 and similar samples (clustered by log−count)

13IT050 #729 gMed=25 rho12=0.04 Nickel (II) chloride 2 mM
13IT041 #720 gMed=28 rho12=0.03 Nickel (II) chloride 2 mM
13IT032 #711 gMed=16 rho12=−0.01 Nickel (II) chloride 2 mM
13IT043 #722 gMed=84 rho12=0.33 copper (II) chloride 2.5 mM
13IT025 #704 gMed=101 rho12=0.34 copper (II) chloride 2.5 mM
13IT034 #713 gMed=70 rho12=0.33 copper (II) chloride 2.5 mM
13IT052 #731 gMed=58 rho12=0.36 copper (II) chloride 2.5 mM
13IT053 #732 gMed=55 rho12=0.33 copper (II) chloride 3 mM
13IT026 #705 gMed=42 rho12=0.32 copper (II) chloride 3 mM
13IT035 #714 gMed=42 rho12=0.36 copper (II) chloride 3 mM
13IT044 #723 gMed=37 rho12=0.33 copper (II) chloride 3 mM
13IT049 #728 gMed=234 rho12=0.32 Nickel (II) chloride 1.5 mM
13IT031 #710 gMed=222 rho12=0.27 Nickel (II) chloride 1.5 mM
13IT040 #719 gMed=171 rho12=0.28 Nickel (II) chloride 1.5 mM
13IT057 #736 gMed=207 rho12=0.05 Time0 25−Jul−16 Keio_ML9_s
13IT024 #703 gMed=213 rho12=0.02 Time0 26−Aug−16 Keio_ML9_
13IT058 #737 gMed=193 rho12=0.05 Time0 25−Jul−16 Keio_ML9_s
13IT023 #702 gMed=233 rho12=−0.01 Time0 26−Aug−16 Keio_ML9
8IT049 #410 gMed=134 rho12=−0.02 Time0 7/20/2015 Keio_ML9_s
13IT038 #717 gMed=282 rho12=0.13 LB
13IT029 #708 gMed=236 rho12=0.13 LB
32IT008 #1174 gMed=442 rho12=0.13 NoPhageControl
13IT056 #735 gMed=281 rho12=0.13 LB
13IT047 #726 gMed=224 rho12=0.16 LB
13IT051 #730 gMed=259 rho12=0.13 copper (II) chloride 2 mM
13IT033 #712 gMed=265 rho12=0.21 copper (II) chloride 2 mM
13IT042 #721 gMed=221 rho12=0.19 copper (II) chloride 2 mM
13IT048 #727 gMed=242 rho12=0.26 Nickel (II) chloride 1 mM
13IT030 #709 gMed=273 rho12=0.23 Nickel (II) chloride 1 mM
13IT039 #718 gMed=284 rho12=0.21 Nickel (II) chloride 1 mM
13IT055 #734 gMed=256 rho12=0.34 Cisplatin 0.1 mg/ml
13IT046 #725 gMed=249 rho12=0.31 Cisplatin 0.1 mg/ml
13IT054 #733 gMed=272 rho12=0.31 Cisplatin 0.05 mg/ml
13IT027 #706 gMed=272 rho12=0.28 Cisplatin 0.05 mg/ml
13IT045 #724 gMed=246 rho12=0.31 Cisplatin 0.05 mg/ml
13IT036 #715 gMed=212 rho12=0.29 Cisplatin 0.05 mg/ml
13IT028 #707 gMed=206 rho12=0.34 Cisplatin 0.1 mg/ml
13IT037 #716 gMed=305 rho12=0.31 Cisplatin 0.1 mg/ml

0.15 0.10 0.05 0.00

10/07/16 Keio_ML9_set14 and similar samples (clustered by log−count)



22−Nov−16 Keio_ML9_set16 and similar samples (clustered by log−count)

16IT064 #817 gMed=0 rho12=0.51 LB_plus_SM_buffer with T4delta
16IT058 #811 gMed=0 rho12=0.50 LB_plus_SM_buffer with T4delta
16IT072 #825 gMed=5 rho12=0.59 LB_plus_SM_buffer with P2_phag
16IT071 #824 gMed=3 rho12=0.55 LB_plus_SM_buffer with P2_phag
16IT060 #813 gMed=3 rho12=0.54 LB_plus_SM_buffer with T4delta
16IT069 #822 gMed=2 rho12=0.53 LB_plus_SM_buffer with T4delta
16IT068 #821 gMed=1 rho12=0.51 LB_plus_SM_buffer with T4delta
16IT063 #816 gMed=1 rho12=0.53 LB_plus_SM_buffer with T4delta
16IT070 #823 gMed=0 rho12=0.51 LB_plus_SM_buffer with P2_phag
16IT059 #812 gMed=1 rho12=0.52 LB_plus_SM_buffer with T4delta
16IT067 #820 gMed=0 rho12=0.51 LB_plus_SM_buffer with T4delta
16IT065 #818 gMed=0 rho12=0.49 LB_plus_SM_buffer with T4delta
16IT062 #815 gMed=0 rho12=0.50 LB_plus_SM_buffer with T4delta
16IT061 #814 gMed=0 rho12=0.49 LB_plus_SM_buffer with T4delta
16IT066 #819 gMed=0 rho12=0.49 LB_plus_SM_buffer with T4delta
16IT057 #810 gMed=0 rho12=0.50 LB_plus_SM_buffer with T4delta
16IT019 #772 gMed=6 rho12=0.50 LB_plus_SM_buffer with T2_phag
16IT018 #771 gMed=3 rho12=0.51 T2_phage 0.1875 MOI
16IT013 #766 gMed=23 rho12=0.50 LB_plus_SM_buffer with T2_phag
16IT011 #764 gMed=14 rho12=0.55 LB_plus_SM_buffer with T2_phag
16IT012 #765 gMed=5 rho12=0.50 LB_plus_SM_buffer with T2_phag
16IT016 #769 gMed=2 rho12=0.46 T2_phage 18.75 MOI
16IT010 #763 gMed=2 rho12=0.45 LB_plus_SM_buffer with T2_phag
16IT017 #770 gMed=2 rho12=0.48 T2_phage 1.875 MOI
16IT015 #768 gMed=1 rho12=0.40 T2_phage 187.5 MOI
32IT001 #1167 gMed=481 rho12=−0.01 Time0 1−May−19 Keio_ML9
21IT087 #966 gMed=676 rho12=0.03 Time0 7−Jul−17 Keio_ML9_se
16IT093 #846 gMed=313 rho12=0.03 Time0 22−Nov−16 Keio_ML9_
32IT002 #1168 gMed=534 rho12=−0.01 Time0 1−May−19 Keio_ML9
16IT001 #754 gMed=315 rho12=0.06 Time0 22−Nov−16 Keio_ML9_
16IT094 #847 gMed=283 rho12=0.01 Time0 22−Nov−16 Keio_ML9_
10IT001 #554 gMed=84 rho12=−0.01 Time0 7/20/2015 Keio_ML9_s
16IT014 #767 gMed=389 rho12=0.23 LB
16IT007 #760 gMed=414 rho12=0.25 LB_plus_SM_buffer
16IT056 #809 gMed=388 rho12=0.21 LB_plus_SM_buffer
16IT044 #797 gMed=426 rho12=0.17 LB_plus_SM_buffer
16IT009 #762 gMed=0 rho12=0.47 LB_plus_SM_buffer with T2_phag
16IT008 #761 gMed=1 rho12=0.49 LB_plus_SM_buffer with T2_phag
16IT024 #777 gMed=0 rho12=0.49 LB_plus_SM_buffer with T3_phag
16IT021 #774 gMed=0 rho12=0.48 LB_plus_SM_buffer with T3_phag
16IT006 #759 gMed=0 rho12=0.45 LB_plus_SM_buffer with T7_phag
16IT005 #758 gMed=0 rho12=0.47 LB_plus_SM_buffer with T7_phag
16IT004 #757 gMed=0 rho12=0.47 LB_plus_SM_buffer with T7_phag
16IT003 #756 gMed=0 rho12=0.38 LB_plus_SM_buffer with T7_phag
16IT002 #755 gMed=0 rho12=0.56 LB_plus_SM_buffer with T7_phag

0.8 0.6 0.4 0.2 0.0

6−Dec−16 Keio_ML9_set16 and similar samples (clustered by log−count)

16IT085 #838 gMed=1 rho12=0.45 LB_plus_SM_buffer with N4_phag
16IT082 #835 gMed=1 rho12=0.46 LB_plus_SM_buffer with N4_phag
16IT083 #836 gMed=0 rho12=0.45 LB_plus_SM_buffer with N4_phag
16IT084 #837 gMed=0 rho12=0.47 LB_plus_SM_buffer with N4_phag
48IT095 #1892 gMed=329 rho12=0.02 Time0 24−Mar−21 Keio_ML9
16IT096 #849 gMed=248 rho12=0.07 Time0 6−Dec−16 Keio_ML9_s
30IT051 #1135 gMed=380 rho12=0.03 Time0 28−Jan−19 Keio_ML9
30IT049 #1133 gMed=411 rho12=0.01 Time0 28−Jan−19 Keio_ML9
16IT095 #848 gMed=261 rho12=0.04 Time0 6−Dec−16 Keio_ML9_s
16IT020 #773 gMed=308 rho12=0.09 Time0 6−Dec−16 Keio_ML9_s
19IT001 #889 gMed=229 rho12=0.01 Time0 22−Mar−17 Keio_ML9_
22IT015 #990 gMed=192 rho12=0.18 N4_phage 0.0009375 MOI TC3
55IT042 #2038 gMed=97 rho12=0.42 MS2_100_B2
19IT072 #929 gMed=234 rho12=0.14 No phage control ML9a
16IT077 #830 gMed=339 rho12=0.19 LB_plus_SM_buffer
16IT076 #829 gMed=16 rho12=0.13 LB_plus_SM_buffer with CI1857_
16IT075 #828 gMed=34 rho12=0.27 LB_plus_SM_buffer with CI1857_
16IT074 #827 gMed=33 rho12=0.52 LB_plus_SM_buffer with CI1857_
22IT018 #993 gMed=21 rho12=0.40 N4_phage 0.009375 MOI TC4
16IT081 #834 gMed=35 rho12=0.10 LB_plus_SM_buffer with I86_pha
16IT080 #833 gMed=12 rho12=0.30 LB_plus_SM_buffer with I86_pha
16IT073 #826 gMed=7 rho12=0.40 LB_plus_SM_buffer with CI1857_
64S54 #2407 gMed=5 rho12=0.43 N4
22IT017 #992 gMed=7 rho12=0.43 N4_phage 0.09375 MOI TC4
16IT086 #839 gMed=5 rho12=0.43 LB_plus_SM_buffer with N4_phag
16IT079 #832 gMed=4 rho12=0.43 LB_plus_SM_buffer with I86_pha
16IT078 #831 gMed=4 rho12=0.36 LB_plus_SM_buffer with I86_pha

0.6 0.5 0.4 0.3 0.2 0.1 0.0

15−Nov−16 Keio_ML9_set16 and similar samples (clustered by log−count)

16IT037 #790 gMed=0 rho12=0.49 LB_plus_SM_buffer with T5_phag
16IT034 #787 gMed=0 rho12=0.50 LB_plus_SM_buffer with T5_phag
65S61 #2579 gMed=0 rho12=0.46 Ste06
30IT055 #1139 gMed=0 rho12=0.50 T5_phage_625_MOI
61S26 #2290 gMed=0 rho12=0.50 Bas05
16IT035 #788 gMed=0 rho12=0.49 LB_plus_SM_buffer with T5_phag
16IT036 #789 gMed=0 rho12=0.49 LB_plus_SM_buffer with T5_phag
16IT026 #779 gMed=0 rho12=0.48 LB_plus_SM_buffer with T3_phag
16IT025 #778 gMed=0 rho12=0.47 LB_plus_SM_buffer with T3_phag
16IT023 #776 gMed=0 rho12=0.48 LB_plus_SM_buffer with T3_phag
16IT022 #775 gMed=0 rho12=0.48 LB_plus_SM_buffer with T3_phag
16IT024 #777 gMed=0 rho12=0.49 LB_plus_SM_buffer with T3_phag
16IT021 #774 gMed=0 rho12=0.48 LB_plus_SM_buffer with T3_phag
65S162 #2653 gMed=0 rho12=0.49 Ste67
65S146 #2641 gMed=0 rho12=0.47 Bas33
69S539 #2840 gMed=0 rho12=0.45 MPec26
16IT041 #794 gMed=0 rho12=0.49 LB_plus_SM_buffer with T6_phag
16IT040 #793 gMed=1 rho12=0.50 LB_plus_SM_buffer with T6_phag
16IT039 #792 gMed=0 rho12=0.49 LB_plus_SM_buffer with T6_phag
64S233 #2491 gMed=0 rho12=0.50 K11
16IT038 #791 gMed=0 rho12=0.50 LB_plus_SM_buffer with T6_phag
16IT072 #825 gMed=5 rho12=0.59 LB_plus_SM_buffer with P2_phag
16IT032 #785 gMed=3 rho12=0.52 LB_plus_SM_buffer with T4_phag
16IT031 #784 gMed=3 rho12=0.52 LB_plus_SM_buffer with T4_phag
16IT043 #796 gMed=3 rho12=0.52 LB_plus_SM_buffer with T6_phag
16IT042 #795 gMed=2 rho12=0.52 LB_plus_SM_buffer with T6_phag
28IT007 #1121 gMed=389 rho12=0.21 LB_plus_SM_buffer
16IT033 #786 gMed=344 rho12=0.17 LB_plus_SM_buffer
61S617 #2359 gMed=378 rho12=0.01 Time0 8/3/23 Keio_ML9_set6
26IT040 #1100 gMed=417 rho12=0.05 Time0 2−May−18 Keio_ML9_
16IT087 #840 gMed=367 rho12=0.01 Time0 15−Nov−16 Keio_ML9_
16IT088 #841 gMed=337 rho12=−0.04 Time0 15−Nov−16 Keio_ML9
16IT089 #842 gMed=350 rho12=−0.00 Time0 15−Nov−16 Keio_ML9
75S654 #3095 gMed=9 rho12=0.49 Control_KEIO
65S69 #2587 gMed=0 rho12=0.44 Ste45
16IT027 #780 gMed=0 rho12=0.49 LB_plus_SM_buffer with T4_phag
16IT030 #783 gMed=1 rho12=0.50 LB_plus_SM_buffer with T4_phag
16IT029 #782 gMed=0 rho12=0.49 LB_plus_SM_buffer with T4_phag
16IT062 #815 gMed=0 rho12=0.50 LB_plus_SM_buffer with T4delta
16IT028 #781 gMed=0 rho12=0.49 LB_plus_SM_buffer with T4_phag

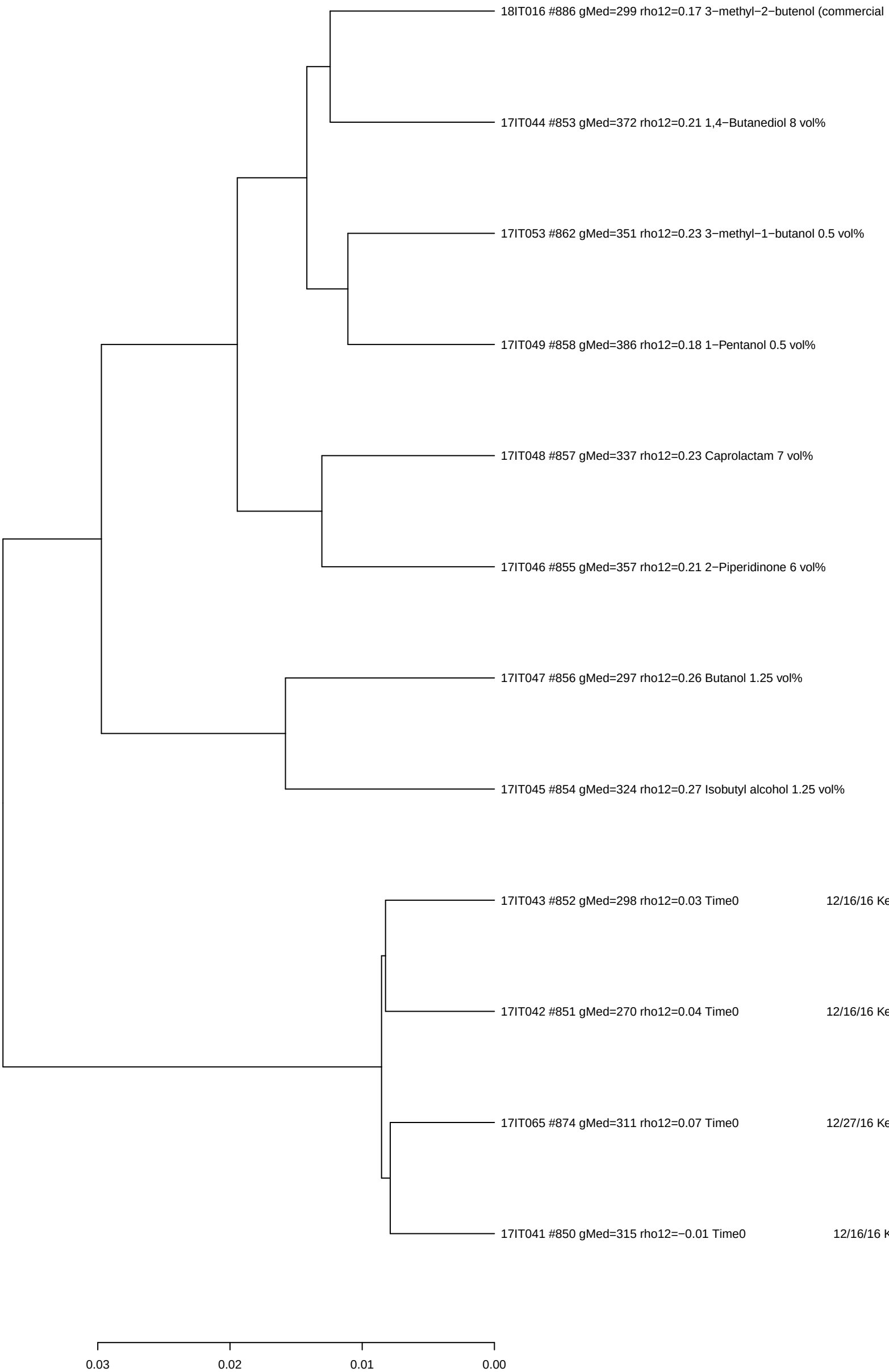
1.0 0.8 0.6 0.4 0.2 0.0

17−Nov−16 Keio_ML9_set16 and similar samples (clustered by log−count)

16IT054 #807 gMed=0 rho12=0.49 LB_plus_SM_buffer with CEV2_ph
16IT035 #788 gMed=0 rho12=0.49 LB_plus_SM_buffer with T5_phag
30IT055 #1139 gMed=0 rho12=0.50 T5_phage_625_MOI
16IT053 #806 gMed=0 rho12=0.49 LB_plus_SM_buffer with CEV2_ph
16IT055 #808 gMed=0 rho12=0.48 LB_plus_SM_buffer with CEV2_ph
16IT048 #801 gMed=7 rho12=0.49 LB_plus_SM_buffer with LZ4_pha
16IT047 #800 gMed=3 rho12=0.48 LB_plus_SM_buffer with LZ4_pha
16IT046 #799 gMed=1 rho12=0.47 LB_plus_SM_buffer with LZ4_pha
32IT008 #1174 gMed=442 rho12=0.13 NoPhageControl
16IT052 #805 gMed=353 rho12=0.15 LB_plus_SM_buffer
16IT056 #809 gMed=388 rho12=0.21 LB_plus_SM_buffer
16IT044 #797 gMed=426 rho12=0.17 LB_plus_SM_buffer
16IT092 #845 gMed=299 rho12=0.06 Time0 17−Nov−16 Keio_ML9_
16IT090 #843 gMed=313 rho12=−0.00 Time0 17−Nov−16 Keio_ML9
34IT067 #1246 gMed=520 rho12=0.05 Time0 4−Apr−19 Keio_ML9_
21IT085 #964 gMed=700 rho12=0.00 Time0 7−Jul−17 Keio_ML9_se
16IT091 #844 gMed=362 rho12=−0.01 Time0 17−Nov−16 Keio_ML9
16IT013 #766 gMed=23 rho12=0.50 LB_plus_SM_buffer with T2_phag
16IT045 #798 gMed=0 rho12=0.49 LB_plus_SM_buffer with LZ4_pha
16IT051 #804 gMed=6 rho12=0.52 LB_plus_SM_buffer with CEV1_ph
16IT050 #803 gMed=4 rho12=0.50 LB_plus_SM_buffer with CEV1_ph
16IT049 #802 gMed=0 rho12=0.47 LB_plus_SM_buffer with CEV1_ph

0.8 0.6 0.4 0.2 0.0

12/16/16 Keio_ML9_set17 and similar samples (clustered by log−count)



12/18/16 Keio_ML9_set17 and similar samples (clustered by log−count)

17IT063 #872 gMed=327 rho12=0.22 Cholinium glutamate 10 vol%

17IT055 #864 gMed=357 rho12=0.19 e−Amino−N−Caproic Acid 10 vol%

17IT053 #862 gMed=351 rho12=0.23 3−methyl−1−butanol 0.5 vol%

17IT049 #858 gMed=386 rho12=0.18 1−Pentanol 0.5 vol%

17IT052 #861 gMed=316 rho12=−0.04 Time0 12/18/16 Keio_ML9_s

17IT050 #859 gMed=309 rho12=0.00 Time0 12/18/16 Keio_ML9_se

17IT051 #860 gMed=302 rho12=0.01 Time0 12/18/16 Keio_ML9_se

17IT042 #851 gMed=270 rho12=0.04 Time0 12/16/16 Keio_ML9_se

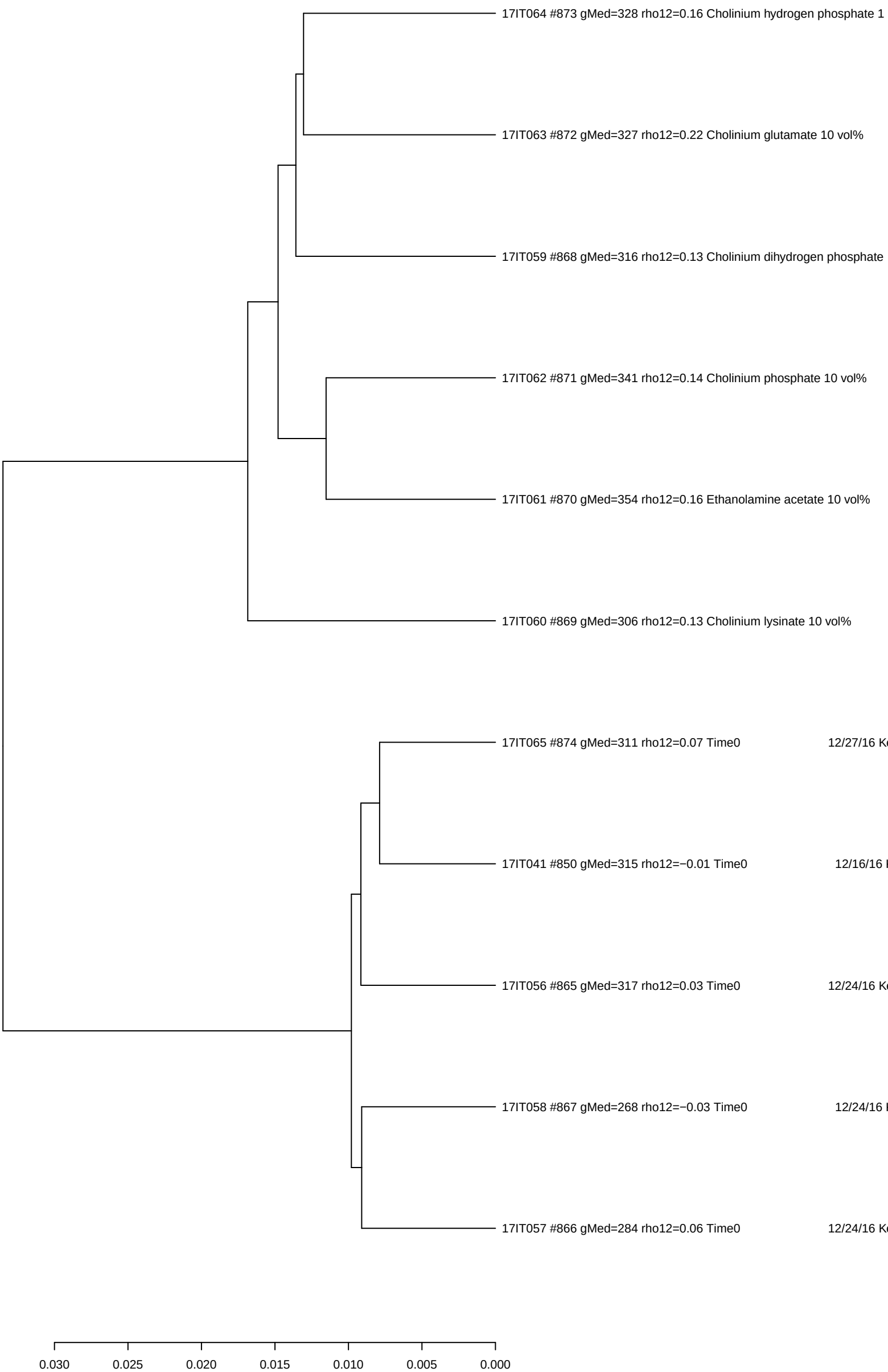
17IT041 #850 gMed=315 rho12=−0.01 Time0 12/16/16 Keio_ML9_s

9IT067 #524 gMed=131 rho12=0.34 LB Anaerobic with Chlorampheni

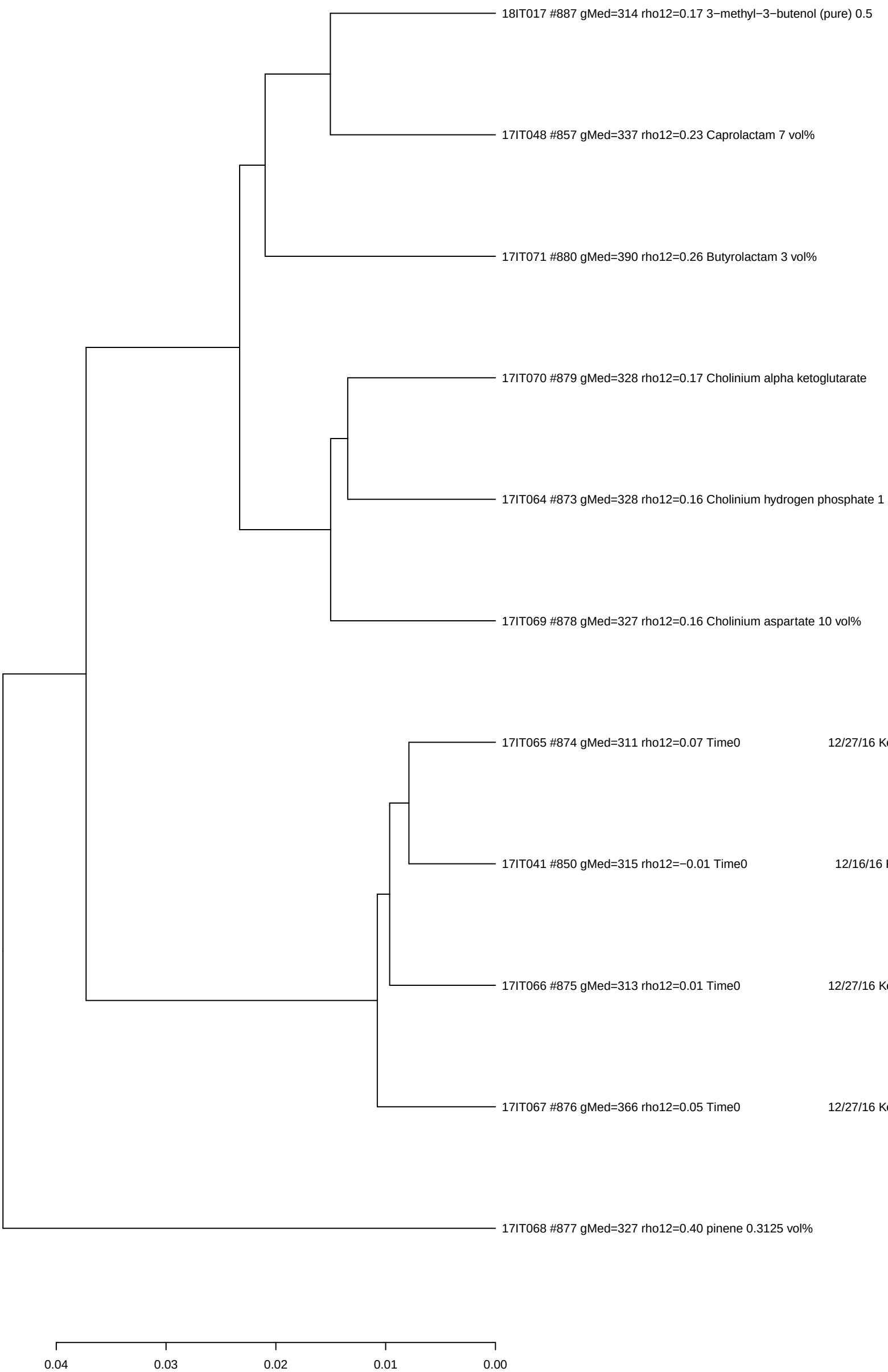
17IT054 #863 gMed=142 rho12=0.24 2−Ethylhexanol 0.07857 vol%

0.15 0.10 0.05 0.00

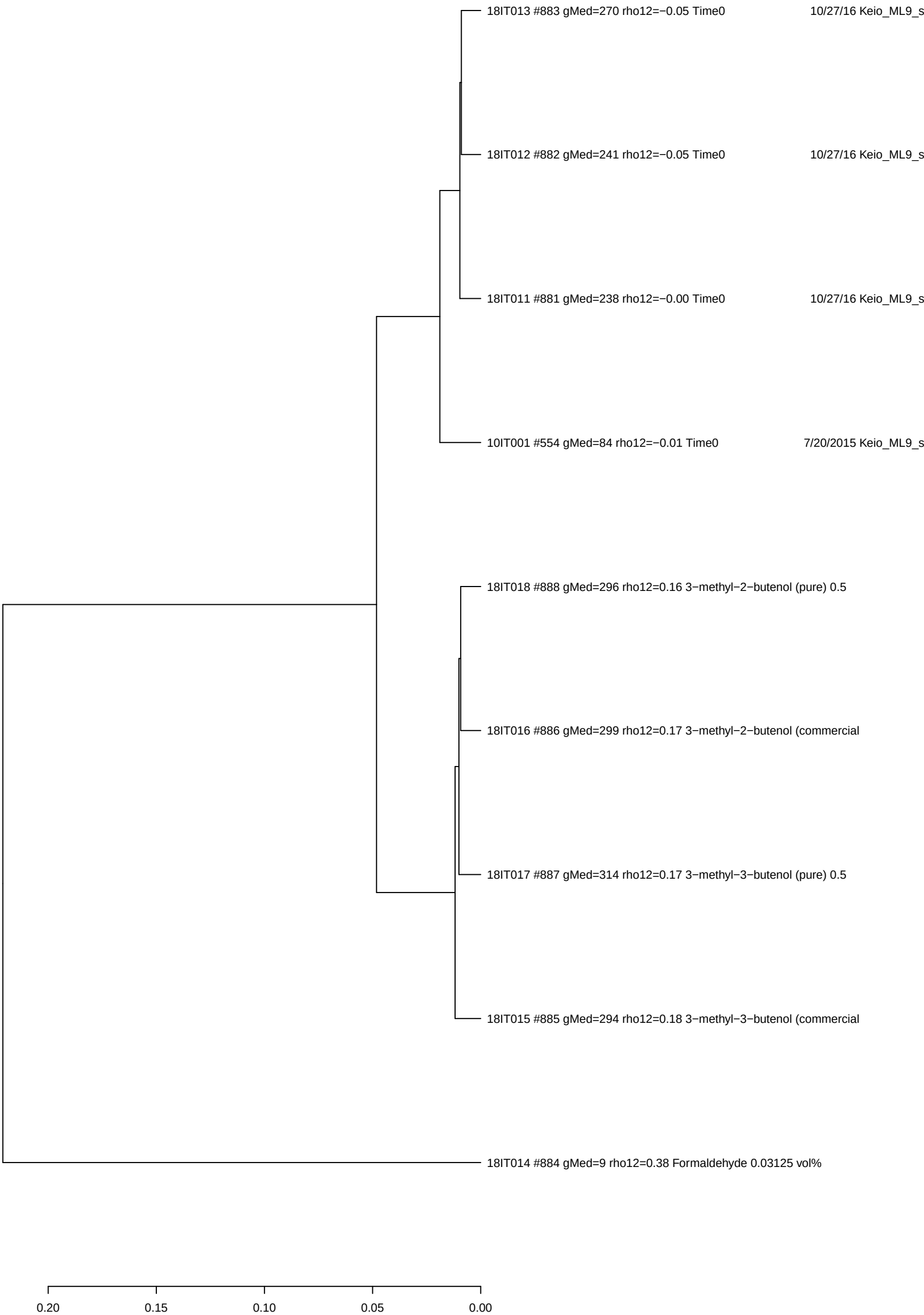
12/24/16 Keio_ML9_set17 and similar samples (clustered by log−count)



12/27/16 Keio_ML9_set17 and similar samples (clustered by log−count)



10/27/16 Keio_ML9_set18 and similar samples (clustered by log−count)

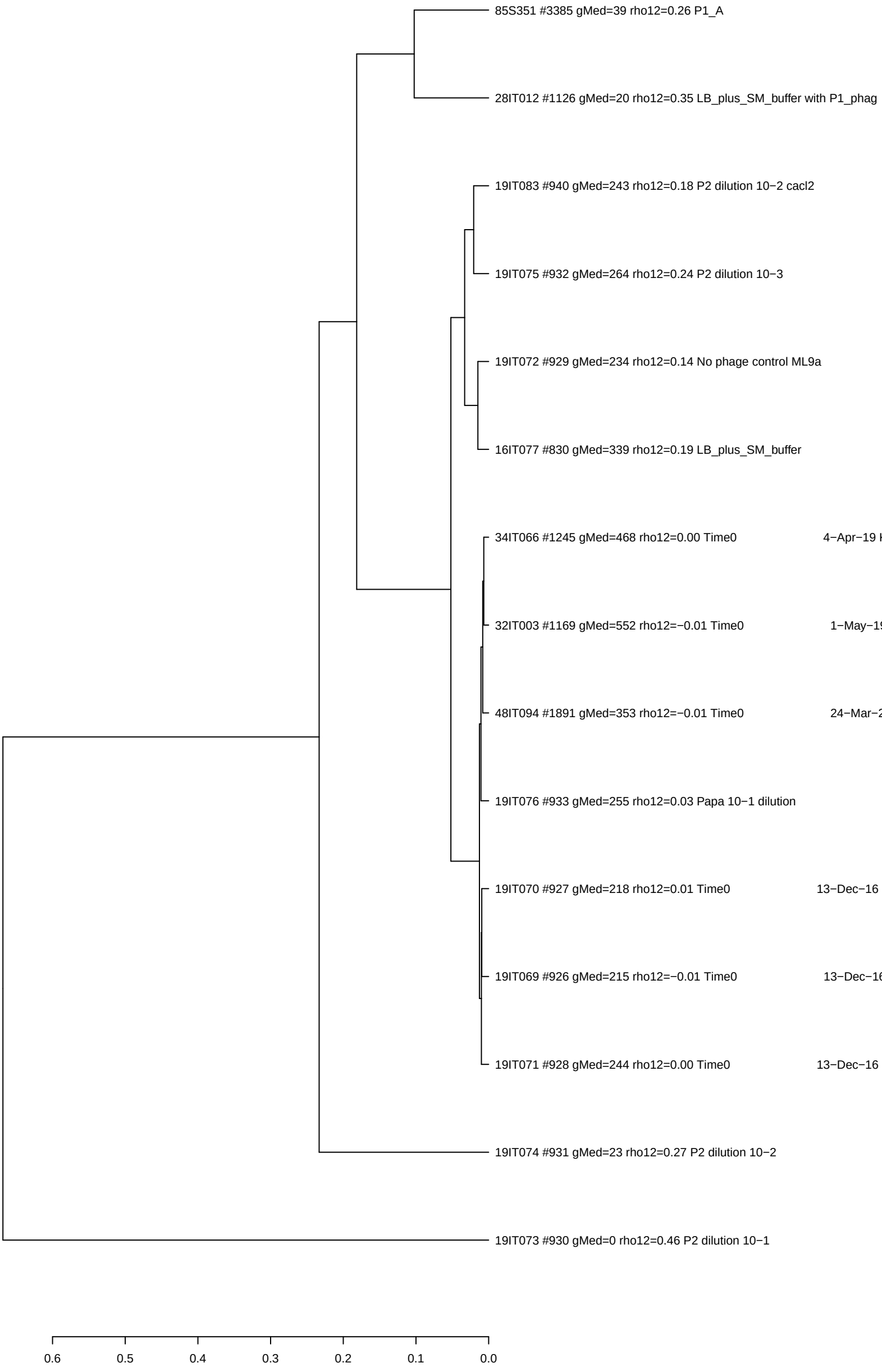


22−Mar−17 Keio_ML9_set19 and similar samples (clustered by log−count)

64S114 #2435 gMed=0 rho12=0.50 Bas57
19IT009 #897 gMed=0 rho12=0.47 LB_plus_SM_buffer with T3_phag
19IT012 #900 gMed=0 rho12=0.47 LB_plus_SM_buffer with T4_phag
19IT010 #898 gMed=0 rho12=0.49 LB_plus_SM_buffer with T4_phag
19IT019 #907 gMed=0 rho12=0.46 LB_plus_SM_buffer with T7_phag
19IT018 #906 gMed=0 rho12=0.49 LB_plus_SM_buffer with T6_phag
19IT029 #917 gMed=0 rho12=0.49 LB_plus_SM_buffer with CEV1_ph
19IT027 #915 gMed=0 rho12=0.42 LB_plus_SM_buffer with LZ4_pha
19IT026 #914 gMed=0 rho12=0.47 LB_plus_SM_buffer with LZ4_pha
19IT022 #910 gMed=0 rho12=0.47 LB_plus_SM_buffer with N4_phag
19IT017 #905 gMed=1 rho12=0.47 LB_plus_SM_buffer with T6_phag
19IT006 #894 gMed=1 rho12=0.43 LB_plus_SM_buffer with T2_phag
19IT033 #921 gMed=20 rho12=0.27 LB_plus_SM_buffer with CEV2_ph
19IT032 #920 gMed=4 rho12=0.38 LB_plus_SM_buffer with CEV2_ph
19IT002 #890 gMed=267 rho12=0.01 Time0 22−Mar−17 Keio_ML9_
19IT001 #889 gMed=229 rho12=0.01 Time0 22−Mar−17 Keio_ML9_
32IT003 #1169 gMed=552 rho12=−0.01 Time0 1−May−19 Keio_ML9
21IT085 #964 gMed=700 rho12=0.00 Time0 7−Jul−17 Keio_ML9_se
19IT003 #891 gMed=245 rho12=0.03 Time0 22−Mar−17 Keio_ML9_
19IT004 #892 gMed=270 rho12=0.04 Time0 22−Mar−17 Keio_ML9_
55IT043 #2039 gMed=278 rho12=0.23 MS2_1000_B3
19IT034 #922 gMed=202 rho12=0.13 NoPhageControl_ML9a
16IT052 #805 gMed=353 rho12=0.15 LB_plus_SM_buffer
49IT037 #1898 gMed=38 rho12=0.02 Time0 19−May−21 Keio_ML9_
22IT027 #1002 gMed=67 rho12=0.36 N4_phage 0.0009375 MOI TC6
19IT024 #912 gMed=146 rho12=0.20 LB_plus_SM_buffer with N4_phag
19IT035 #923 gMed=9 rho12=0.29 T5phage_small_colonies_ML9a
19IT023 #911 gMed=13 rho12=0.37 LB_plus_SM_buffer with N4_phag
19IT025 #913 gMed=11 rho12=0.39 LB_plus_SM_buffer with LZ4_pha
19IT008 #896 gMed=14 rho12=0.34 LB_plus_SM_buffer with T3_phag
19IT011 #899 gMed=17 rho12=0.34 LB_plus_SM_buffer with T4_phag
19IT028 #916 gMed=93 rho12=0.25 LB_plus_SM_buffer with CEV1_ph
19IT014 #902 gMed=24 rho12=0.35 LB_plus_SM_buffer with T5_phag
19IT013 #901 gMed=24 rho12=0.32 LB_plus_SM_buffer with T5_phag
19IT005 #893 gMed=10 rho12=0.28 LB_plus_SM_buffer with T2_phag
19IT016 #904 gMed=8 rho12=0.41 LB_plus_SM_buffer with T6_phag
19IT037 #925 gMed=8 rho12=0.33 LB_plus_SM_buffer with T3_phag
19IT007 #895 gMed=145 rho12=0.15 LB_plus_SM_buffer with T2_phag
19IT020 #908 gMed=0 rho12=0.32 LB_plus_SM_buffer with T7_phag
30IT055 #1139 gMed=0 rho12=0.50 T5_phage_625_MOI
19IT030 #918 gMed=0 rho12=0.49 LB_plus_SM_buffer with CEV1_ph
19IT015 #903 gMed=0 rho12=0.49 LB_plus_SM_buffer with T5_phag
19IT031 #919 gMed=0 rho12=0.49 LB_plus_SM_buffer with CEV2_ph

0.8 0.6 0.4 0.2 0.0

13−Dec−16 Keio_ML9_set19 and similar samples (clustered by log−count)



19−Jan−17 Keio_ML9_set19 and similar samples (clustered by log−count)

19IT088 #945 gMed=300 rho12=0.09 Papa dilution 10−4 cacl2 malto

19IT087 #944 gMed=330 rho12=0.09 Papa dilution 10−3 cacl2 malto

19IT081 #938 gMed=274 rho12=0.11 No phage control ML9a

30IT091 #1151 gMed=407 rho12=0.04 Time0 26−Jan−19 Keio_ML9

19IT077 #934 gMed=263 rho12=−0.00 Time0 19−Jan−17 Keio_ML9

30IT050 #1134 gMed=397 rho12=−0.01 Time0 28−Jan−19 Keio_ML

30IT049 #1133 gMed=411 rho12=0.01 Time0 28−Jan−19 Keio_ML9

19IT080 #937 gMed=236 rho12=−0.01 Time0 19−Jan−17 Keio_ML9

19IT079 #936 gMed=254 rho12=−0.01 Time0 19−Jan−17 Keio_ML9

19IT083 #940 gMed=243 rho12=0.18 P2 dilution 10−2 cacl2

19IT082 #939 gMed=276 rho12=0.14 P2 dilution 10−1 cacl2

19IT084 #941 gMed=258 rho12=0.24 P2 dilution 10−3 cacl2

19IT086 #943 gMed=118 rho12=0.36 Papa dilution 10−2 cacl2 malto

19IT085 #942 gMed=98 rho12=0.44 Papa dilution 10−1 cacl2 malto

0.05 0.04 0.03 0.02 0.01 0.00

2−Apr−17 Keio_ML9_set20 and similar samples (clustered by log−count)

20IT007 #952 gMed=1384 rho12=0.64 M9 Acetate 0.5% aerobic

20IT006 #951 gMed=1835 rho12=0.64 M9 Acetate 0.5% aerobic

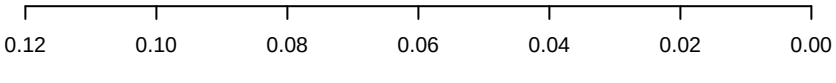
20IT005 #950 gMed=2184 rho12=0.62 M9 Glucose 2% aerobic

20IT004 #949 gMed=2307 rho12=0.61 M9 Glucose 2% aerobic

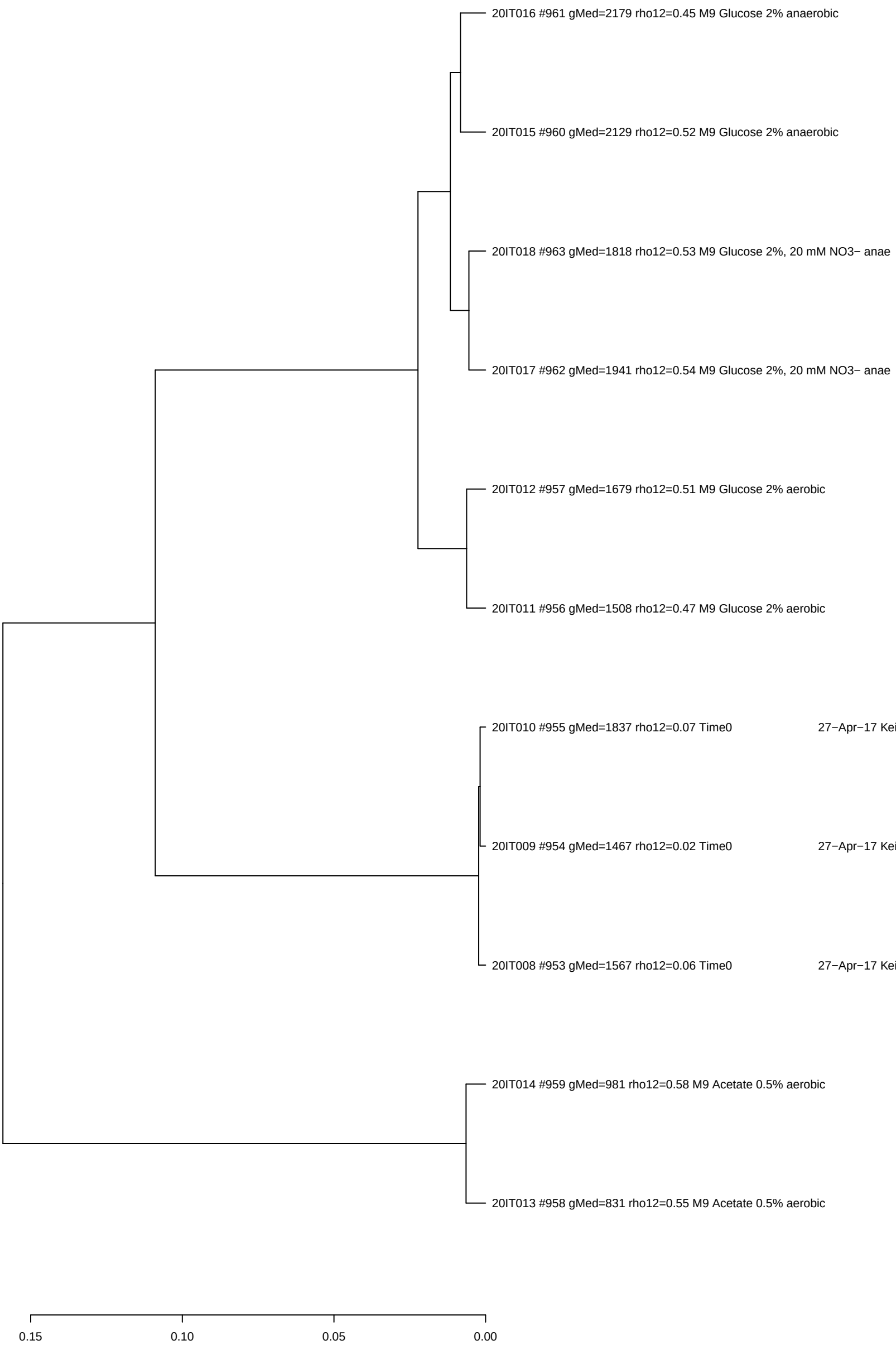
20IT003 #948 gMed=1909 rho12=0.08 Time0 2−Apr−17 Keio_ML9_

20IT001 #946 gMed=1665 rho12=0.14 Time0 2−Apr−17 Keio_ML9_

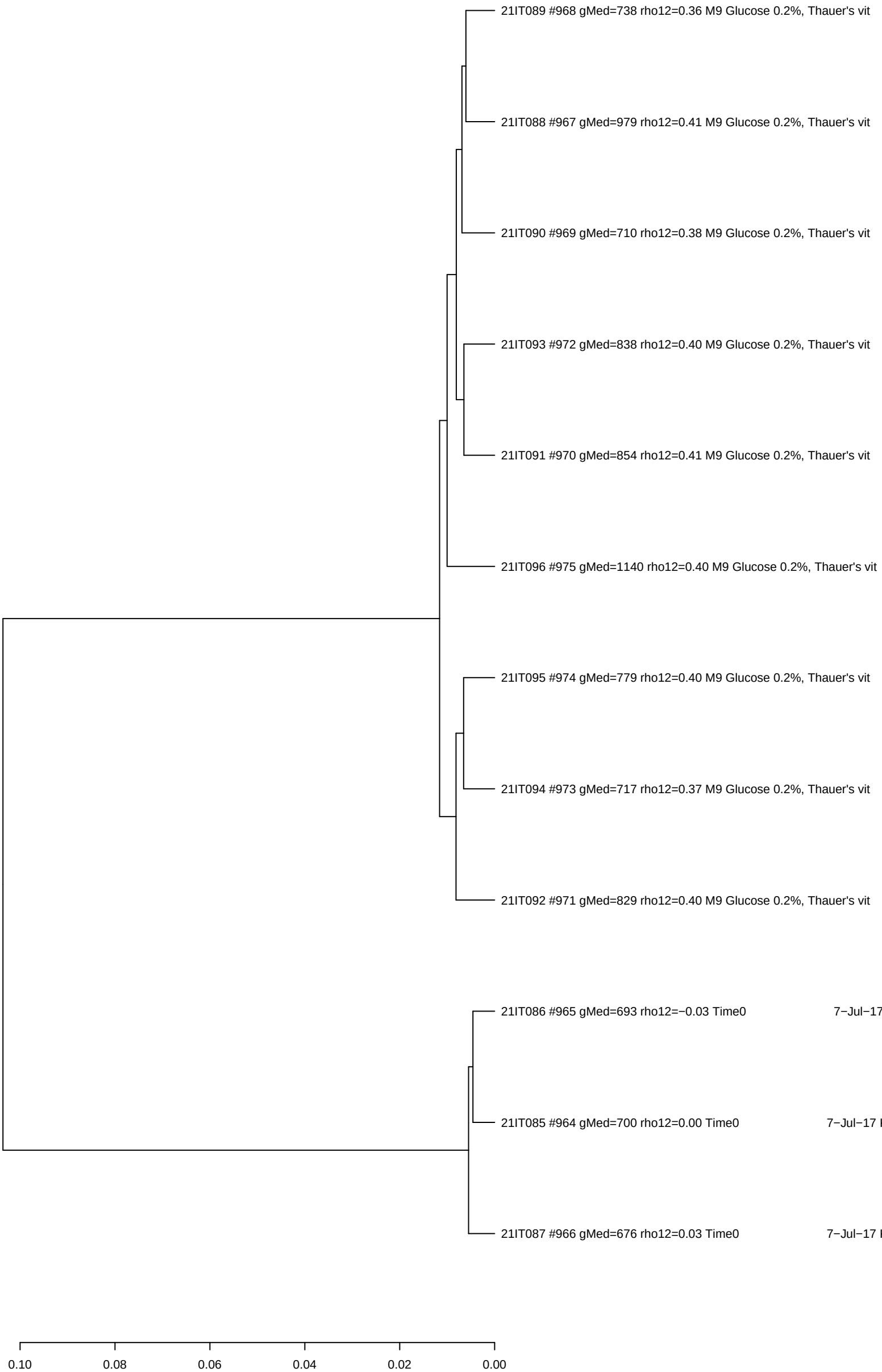
20IT002 #947 gMed=2200 rho12=0.18 Time0 2−Apr−17 Keio_ML9_



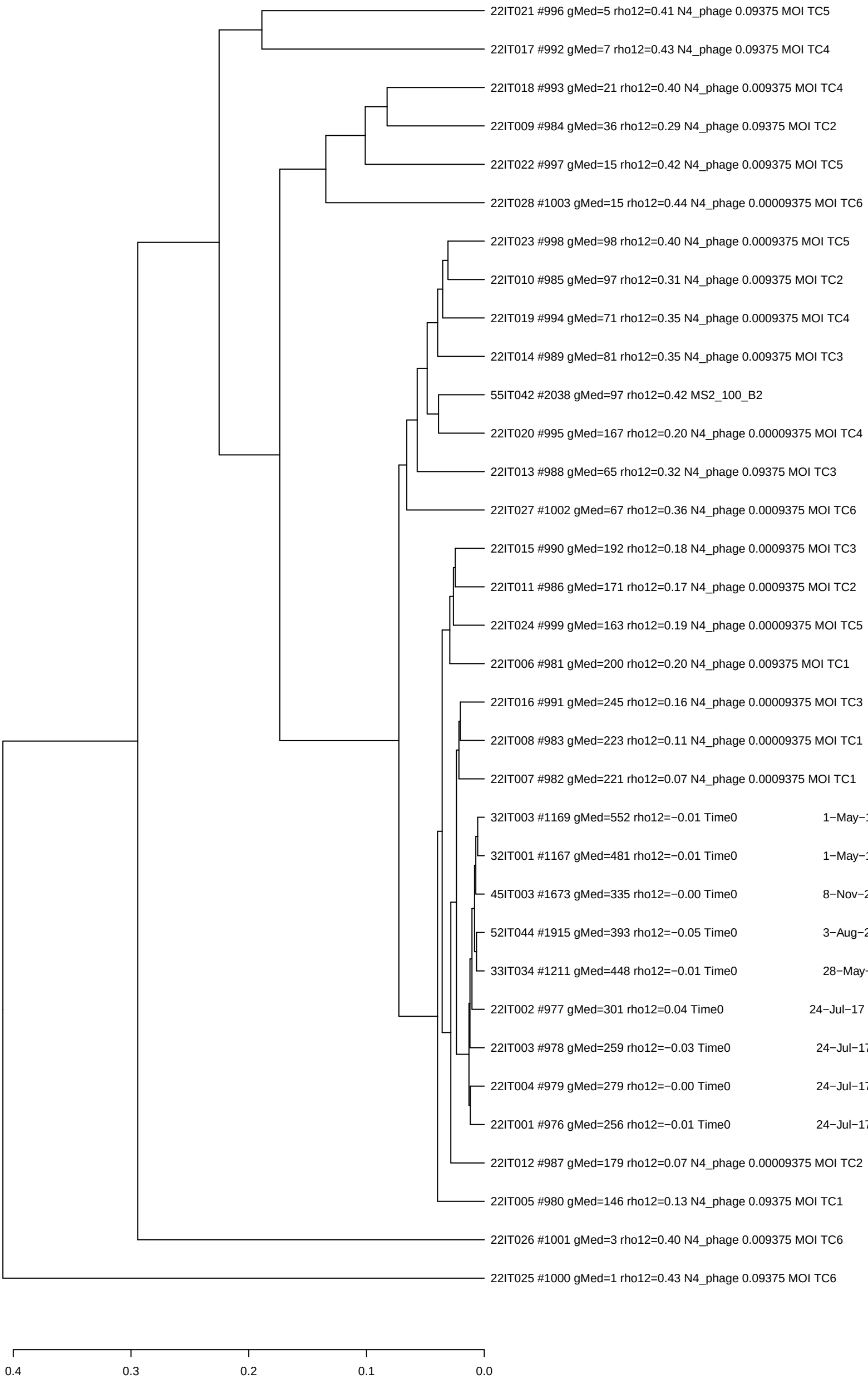
27−Apr−17 Keio_ML9_set20 and similar samples (clustered by log−count)



7−Jul−17 Keio_ML9_set21 and similar samples (clustered by log−count)



24−Jul−17 Keio_ML9_set22 and similar samples (clustered by log−count)

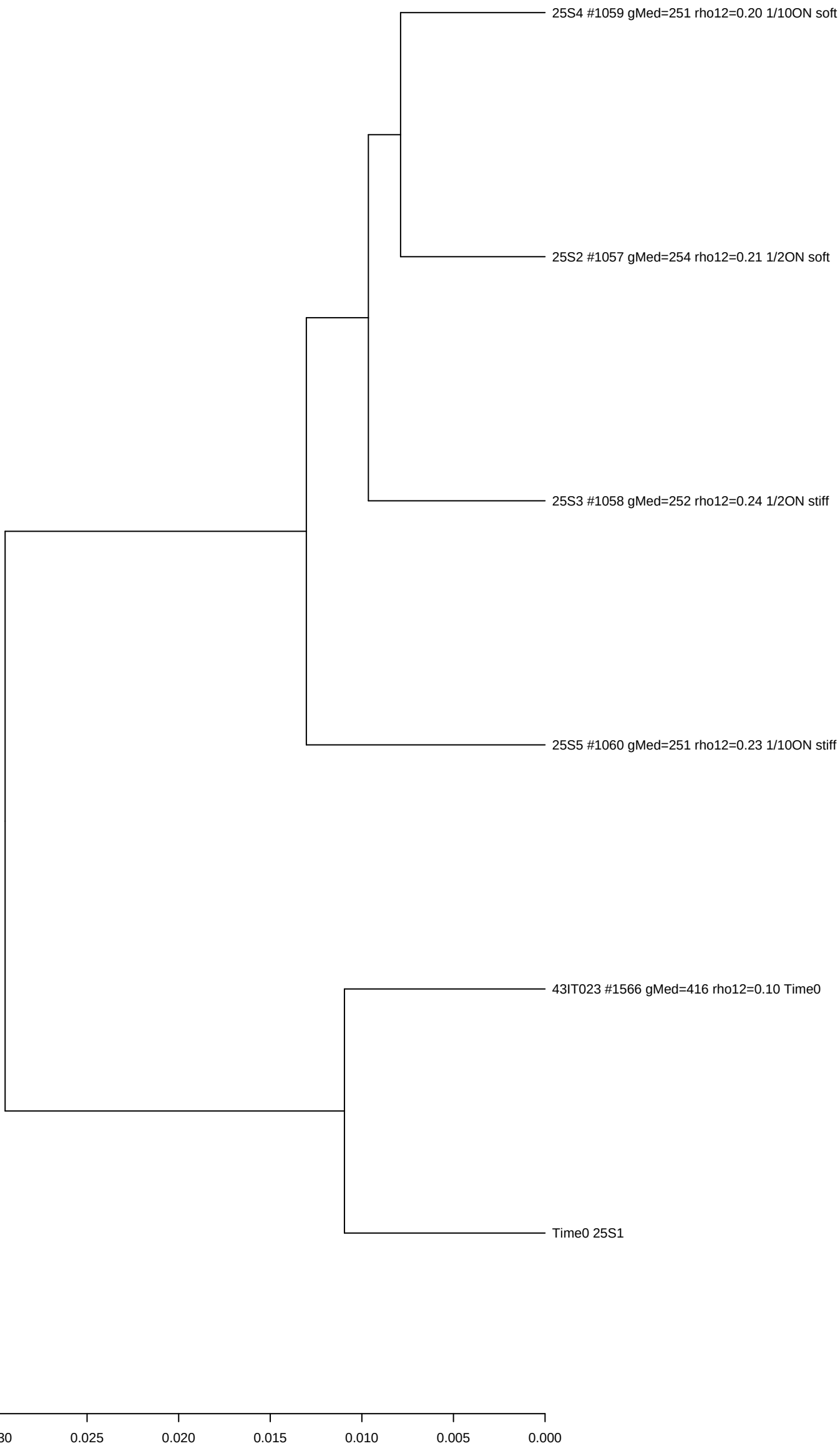


21−Aug−17 Keio_ML9_set22 and similar samples (clustered by log−count)

22IT053 #1028 gMed=0 rho12=0.48 T5_phage 0.0625 MOI TC6
22IT049 #1024 gMed=0 rho12=0.48 T5_phage 0.0625 MOI TC5
64S18 #2389 gMed=0 rho12=0.49 T5
30IT055 #1139 gMed=0 rho12=0.50 T5_phage_625_MOI
64S17 #2388 gMed=0 rho12=0.49 T5
22IT045 #1020 gMed=0 rho12=0.48 T5_phage 0.0625 MOI TC4
22IT054 #1029 gMed=0 rho12=0.48 T5_phage 0.00625 MOI TC6
22IT055 #1030 gMed=0 rho12=0.48 T5_phage 0.000625 MOI TC6
22IT041 #1016 gMed=0 rho12=0.48 T5_phage 0.0625 MOI TC3
22IT047 #1022 gMed=0 rho12=0.48 T5_phage 0.000625 MOI TC4
22IT037 #1012 gMed=0 rho12=0.48 T5_phage 0.0625 MOI TC2
22IT051 #1026 gMed=0 rho12=0.48 T5_phage 0.000625 MOI TC5
22IT050 #1025 gMed=0 rho12=0.48 T5_phage 0.00625 MOI TC5
22IT046 #1021 gMed=0 rho12=0.47 T5_phage 0.00625 MOI TC4
22IT042 #1017 gMed=0 rho12=0.45 T5_phage 0.00625 MOI TC3
22IT033 #1008 gMed=0 rho12=0.43 T5_phage 0.0625 MOI TC1
22IT052 #1027 gMed=6 rho12=0.42 T5_phage 0.0000625 MOI TC5
22IT048 #1023 gMed=9 rho12=0.34 T5_phage 0.0000625 MOI TC4
22IT034 #1009 gMed=7 rho12=0.36 T5_phage 0.00625 MOI TC1
22IT043 #1018 gMed=3 rho12=0.43 T5_phage 0.000625 MOI TC3
22IT038 #1013 gMed=3 rho12=0.45 T5_phage 0.00625 MOI TC2
22IT039 #1014 gMed=6 rho12=0.36 T5_phage 0.000625 MOI TC2
19IT014 #902 gMed=24 rho12=0.35 LB_plus_SM_buffer with T5_phag
19IT013 #901 gMed=24 rho12=0.32 LB_plus_SM_buffer with T5_phag
22IT031 #1006 gMed=309 rho12=0.01 Time0 21−Aug−17 Keio_ML9
22IT030 #1005 gMed=274 rho12=−0.02 Time0 21−Aug−17 Keio_ML
22IT032 #1007 gMed=255 rho12=−0.02 Time0 21−Aug−17 Keio_ML
22IT029 #1004 gMed=281 rho12=−0.01 Time0 21−Aug−17 Keio_ML
52IT046 #1917 gMed=366 rho12=0.02 Time0 3−Aug−21 Keio_ML9_
52IT045 #1916 gMed=342 rho12=0.01 Time0 3−Aug−21 Keio_ML9_
19IT070 #927 gMed=218 rho12=0.01 Time0 13−Dec−16 Keio_ML9_
Time0 14IT018
10IT001 #554 gMed=84 rho12=−0.01 Time0 7/20/2015 Keio_ML9_s
16IT081 #834 gMed=35 rho12=0.10 LB_plus_SM_buffer with I86_pha
22IT036 #1011 gMed=60 rho12=0.11 T5_phage 0.0000625 MOI TC1
22IT040 #1015 gMed=61 rho12=0.18 T5_phage 0.0000625 MOI TC2
22IT062 #1037 gMed=319 rho12=0.33 T7_phage 0.00015625 MOI TC2
22IT057 #1032 gMed=254 rho12=0.30 T7_phage 0.0015625 MOI TC1
22IT070 #1045 gMed=197 rho12=0.30 T7_phage 0.00015625 MOI TC4
22IT067 #1042 gMed=368 rho12=0.20 T7_phage 0.000015625 MOI TC3
22IT063 #1038 gMed=294 rho12=0.20 T7_phage 0.000015625 MOI TC2
22IT071 #1046 gMed=292 rho12=0.19 T7_phage 0.000015625 MOI TC4
22IT075 #1050 gMed=310 rho12=0.12 T7_phage 0.000015625 MOI TC5
22IT059 #1034 gMed=282 rho12=0.17 T7_phage 0.000015625 MOI TC1
22IT058 #1033 gMed=267 rho12=0.13 T7_phage 0.00015625 MOI TC1
22IT076 #1051 gMed=302 rho12=0.13 T7_phage 0.0000015625 MOI TC5
53IT071 #1993 gMed=505 rho12=0.24 diversity test of Keio_ML9a_uc
32IT008 #1174 gMed=442 rho12=0.13 NoPhageControl
19IT087 #944 gMed=330 rho12=0.09 Papa dilution 10−3 cacl2 malto
22IT068 #1043 gMed=263 rho12=0.16 T7_phage 0.0000015625 MOI TC3
22IT060 #1035 gMed=224 rho12=0.12 T7_phage 0.0000015625 MOI TC1
22IT072 #1047 gMed=237 rho12=0.12 T7_phage 0.0000015625 MOI TC4
22IT064 #1039 gMed=322 rho12=0.11 T7_phage 0.0000015625 MOI TC2
22IT080 #1055 gMed=264 rho12=0.18 T7_phage 0.0000015625 MOI TC6
22IT079 #1054 gMed=56 rho12=0.13 T7_phage 0.000015625 MOI TC6
22IT074 #1049 gMed=98 rho12=0.25 T7_phage 0.00015625 MOI TC5
22IT066 #1041 gMed=211 rho12=0.25 T7_phage 0.00015625 MOI TC3
22IT061 #1036 gMed=143 rho12=0.21 T7_phage 0.0015625 MOI TC2
22IT065 #1040 gMed=77 rho12=0.21 T7_phage 0.0015625 MOI TC3
22IT069 #1044 gMed=43 rho12=0.25 T7_phage 0.0015625 MOI TC4
22IT073 #1048 gMed=32 rho12=0.26 T7_phage 0.0015625 MOI TC5
22IT044 #1019 gMed=37 rho12=0.23 T5_phage 0.0000625 MOI TC3
22IT035 #1010 gMed=14 rho12=0.32 T5_phage 0.000625 MOI TC1
22IT056 #1031 gMed=0 rho12=0.47 T5_phage 0.0000625 MOI TC6
22IT078 #1053 gMed=0 rho12=0.37 T7_phage 0.00015625 MOI TC6
22IT077 #1052 gMed=1 rho12=0.41 T7_phage 0.0015625 MOI TC6

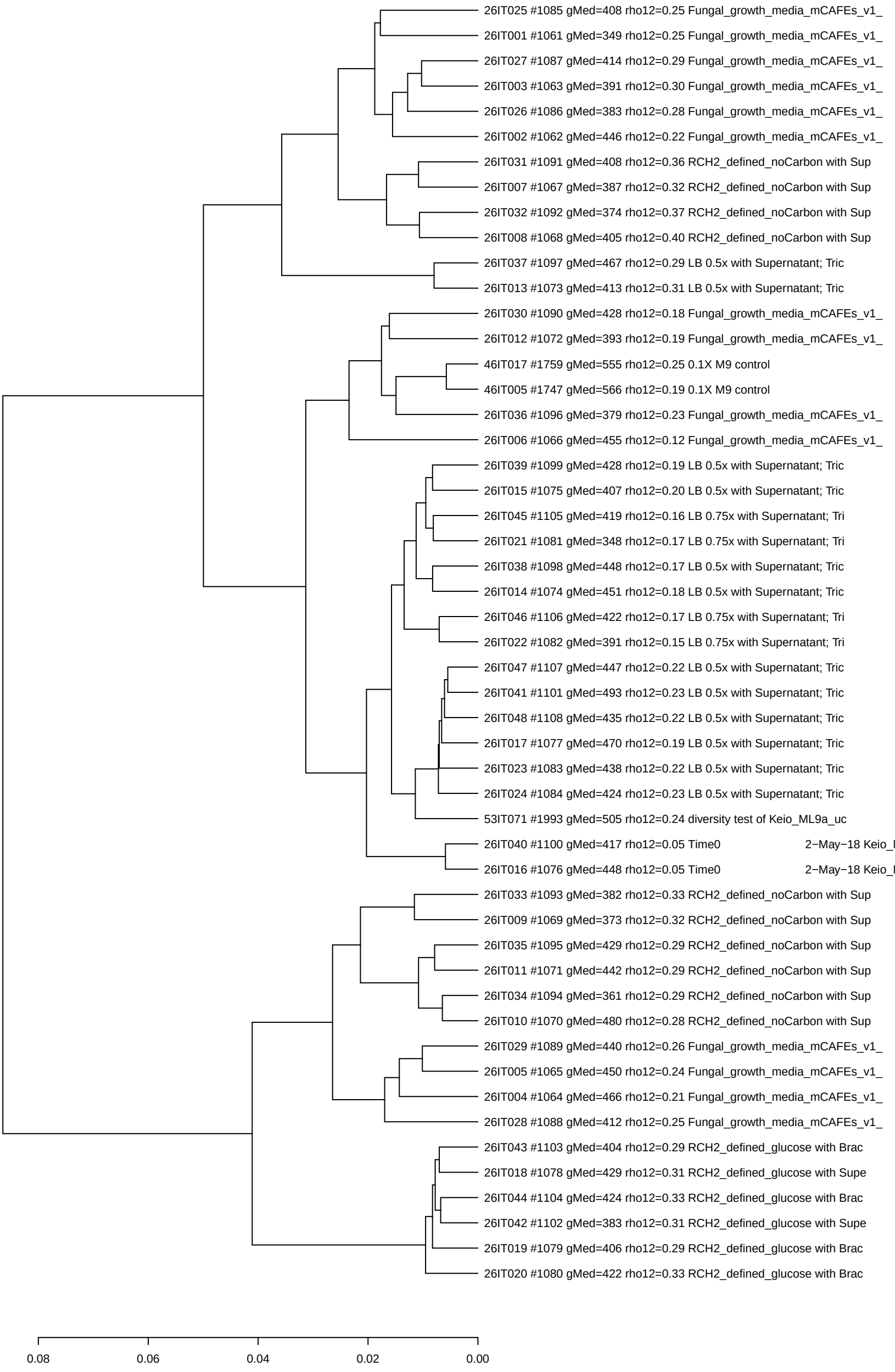
1.0 0.8 0.6 0.4 0.2 0.0

12/18/2017 Keio_ML9_set25 and similar samples (clustered by log−count)

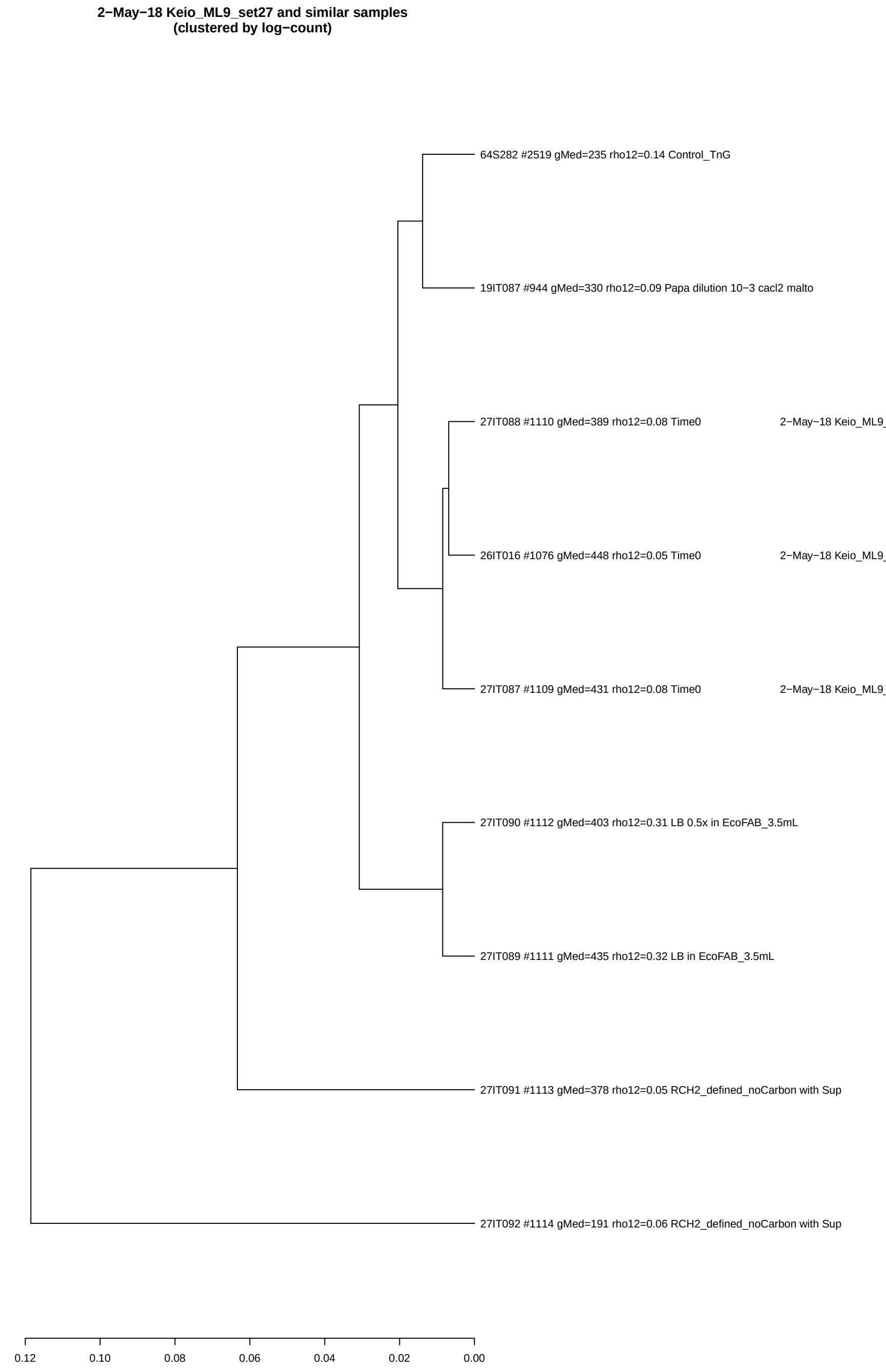


27−Oct−20 Keio_ML9

2−May−18 Keio_ML9_set26 and similar samples (clustered by log−count)



2−May−18 Keio_ML9_set27 and similar samples (clustered by log−count)



16−Nov−18 Keio_ML9_set28 and similar samples
(clustered by log−count)

28IT006 #1120 gMed=0 rho12=0.44 LB_plus_SM_buffer with T7_phag
28IT005 #1119 gMed=0 rho12=0.45 LB_plus_SM_buffer with T7_phag
28IT008 #1122 gMed=0 rho12=0.46 LB_plus_SM_buffer with P1_phag
85S351 #3385 gMed=39 rho12=0.26 P1_A
28IT012 #1126 gMed=20 rho12=0.35 LB_plus_SM_buffer with P1_phag
28IT011 #1125 gMed=10 rho12=0.40 LB_plus_SM_buffer with P1_phag
28IT010 #1124 gMed=4 rho12=0.40 LB_plus_SM_buffer with P1_phag
28IT009 #1123 gMed=2 rho12=0.41 LB_plus_SM_buffer with P1_phag
33IT034 #1211 gMed=448 rho12=−0.01 Time0 28−May−19 Keio_ML
28IT003 #1117 gMed=306 rho12=0.02 Time0 16−Nov−18 Keio_ML9
34IT067 #1246 gMed=520 rho12=0.05 Time0 4−Apr−19 Keio_ML9_
32IT003 #1169 gMed=552 rho12=−0.01 Time0 1−May−19 Keio_ML9
28IT002 #1116 gMed=364 rho12=0.00 Time0 16−Nov−18 Keio_ML9
28IT001 #1115 gMed=317 rho12=0.03 Time0 16−Nov−18 Keio_ML9
28IT007 #1121 gMed=389 rho12=0.21 LB_plus_SM_buffer
28IT004 #1118 gMed=402 rho12=0.25 LB_plus_SM_buffer

0.7 0.6 0.5 0.4 0.3 0.2 0.1 0.0

1−Nov−18 Keio_ML9_set29 and similar samples (clustered by log−count)

29IT017 #1131 gMed=369 rho12=0.15 LB_plus_SM_buffer with N4_phag

29IT016 #1130 gMed=400 rho12=0.12 LB_plus_SM_buffer in droplets

29IT018 #1132 gMed=397 rho12=0.14 LB_plus_SM_buffer with N4_phag

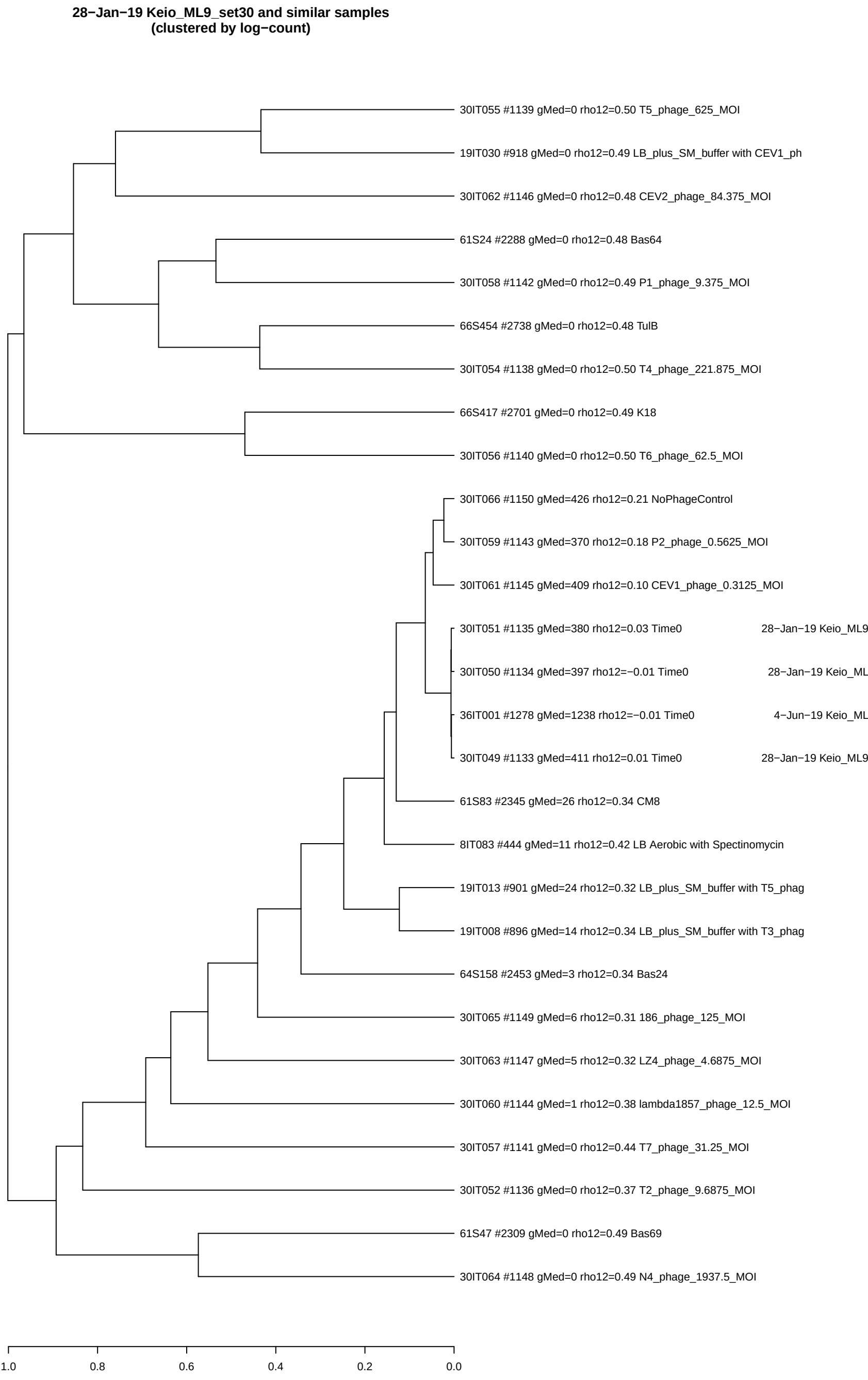
30IT050 #1134 gMed=397 rho12=−0.01 Time0 28−Jan−19 Keio_ML

29IT015 #1129 gMed=382 rho12=−0.02 Time0 1−Nov−18 Keio_ML9

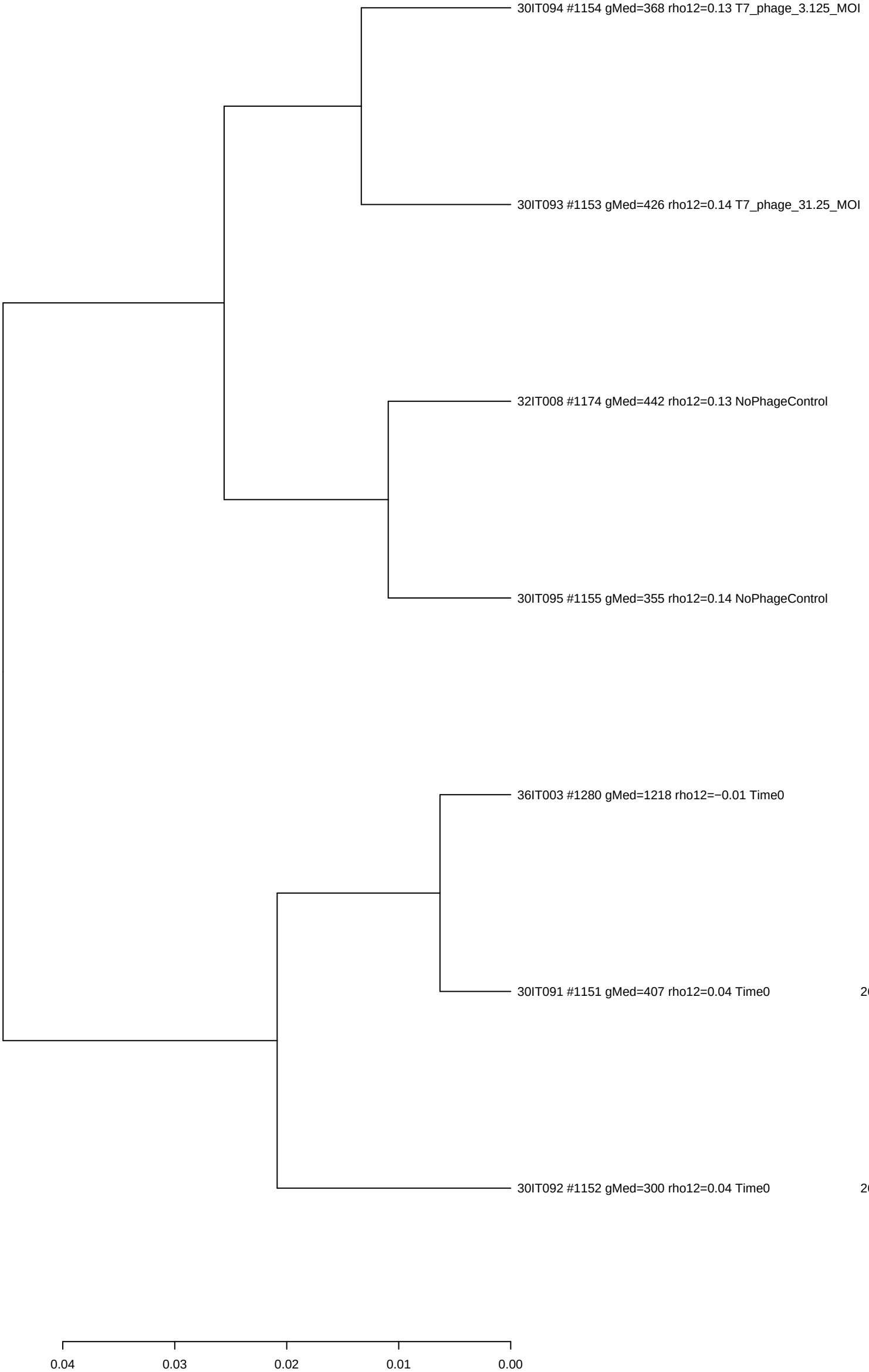
29IT013 #1127 gMed=400 rho12=0.00 Time0 1−Nov−18 Keio_ML9_

29IT014 #1128 gMed=396 rho12=0.01 Time0 1−Nov−18 Keio_ML9_

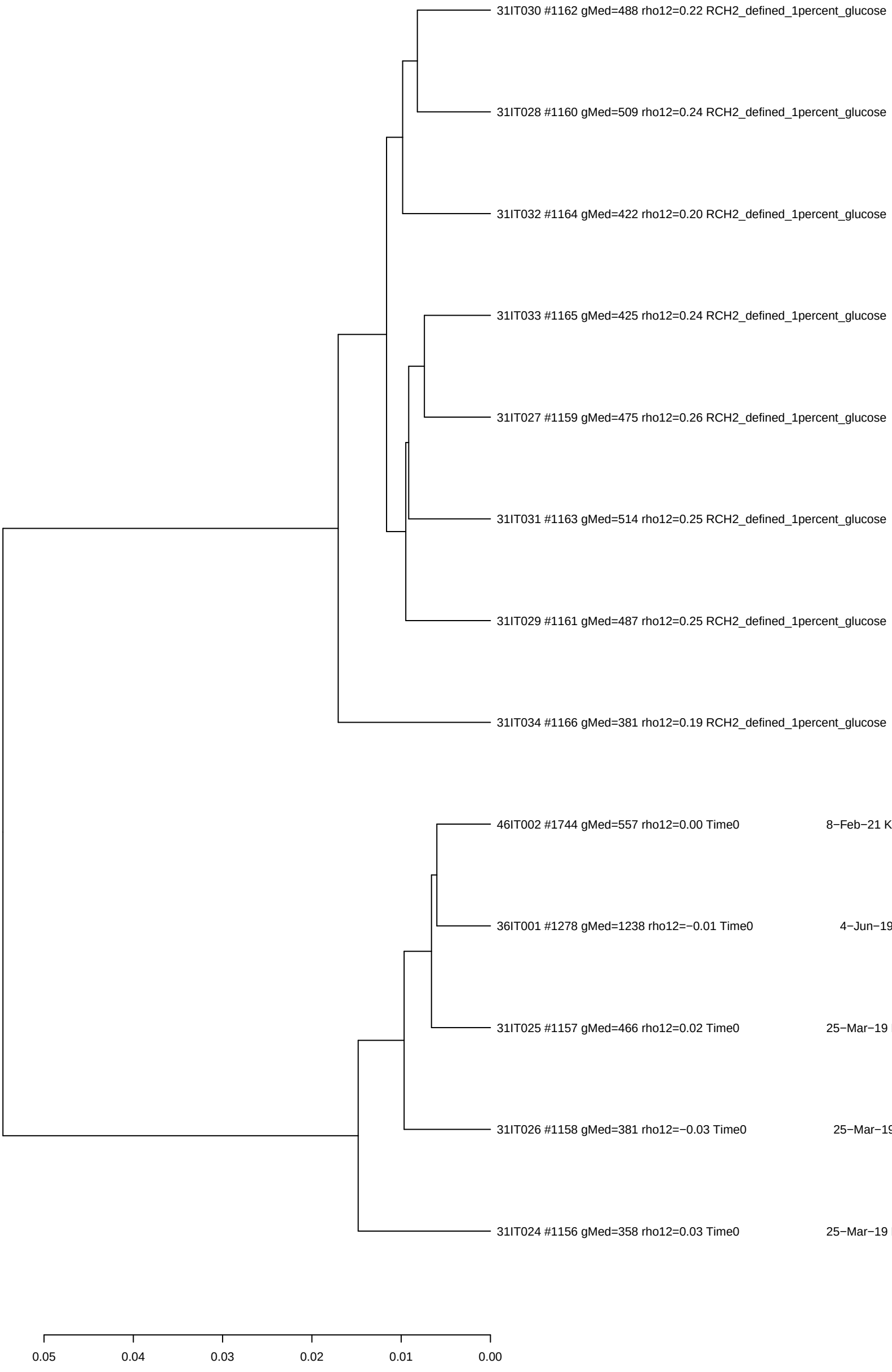
0.025 0.020 0.015 0.010 0.005 0.000


28−Jan−19 Keio_ML9_set30 and similar samples
(clustered by log−count)
30IT055 #1139 gMed=0 rho12=0.50 T5_phage_625_MOI
19IT030 #918 gMed=0 rho12=0.49 LB_plus_SM_buffer with CEV1_ph
30IT062 #1146 gMed=0 rho12=0.48 CEV2_phage_84.375_MOI
61S24 #2288 gMed=0 rho12=0.48 Bas64
30IT058 #1142 gMed=0 rho12=0.49 P1_phage_9.375_MOI
66S454 #2738 gMed=0 rho12=0.48 TulB
30IT054 #1138 gMed=0 rho12=0.50 T4_phage_221.875_MOI
66S417 #2701 gMed=0 rho12=0.49 K18
30IT056 #1140 gMed=0 rho12=0.50 T6_phage_62.5_MOI
30IT066 #1150 gMed=426 rho12=0.21 NoPhageControl
30IT059 #1143 gMed=370 rho12=0.18 P2_phage_0.5625_MOI
30IT061 #1145 gMed=409 rho12=0.10 CEV1_phage_0.3125_MOI
30IT051 #1135 gMed=380 rho12=0.03 Time0
28−Jan−19 Keio_ML9
30IT050 #1134 gMed=397 rho12=−0.01 Time0
28−Jan−19 Keio_ML
36IT001 #1278 gMed=1238 rho12=−0.01 Time0
4−Jun−19 Keio_ML
30IT049 #1133 gMed=411 rho12=0.01 Time0
28−Jan−19 Keio_ML9
61S83 #2345 gMed=26 rho12=0.34 CM8
8IT083 #444 gMed=11 rho12=0.42 LB Aerobic with Spectinomycin
19IT013 #901 gMed=24 rho12=0.32 LB_plus_SM_buffer with T5_phag
19IT008 #896 gMed=14 rho12=0.34 LB_plus_SM_buffer with T3_phag
64S158 #2453 gMed=3 rho12=0.34 Bas24
30IT065 #1149 gMed=6 rho12=0.31 186_phage_125_MOI
30IT063 #1147 gMed=5 rho12=0.32 LZ4_phage_4.6875_MOI
30IT060 #1144 gMed=1 rho12=0.38 lambda1857_phage_12.5_MOI
30IT057 #1141 gMed=0 rho12=0.44 T7_phage_31.25_MOI
30IT052 #1136 gMed=0 rho12=0.37 T2_phage_9.6875_MOI
61S47 #2309 gMed=0 rho12=0.49 Bas69
30IT064 #1148 gMed=0 rho12=0.49 N4_phage_1937.5_MOI
1.0
0.8
0.6
0.4
0.2
0.0

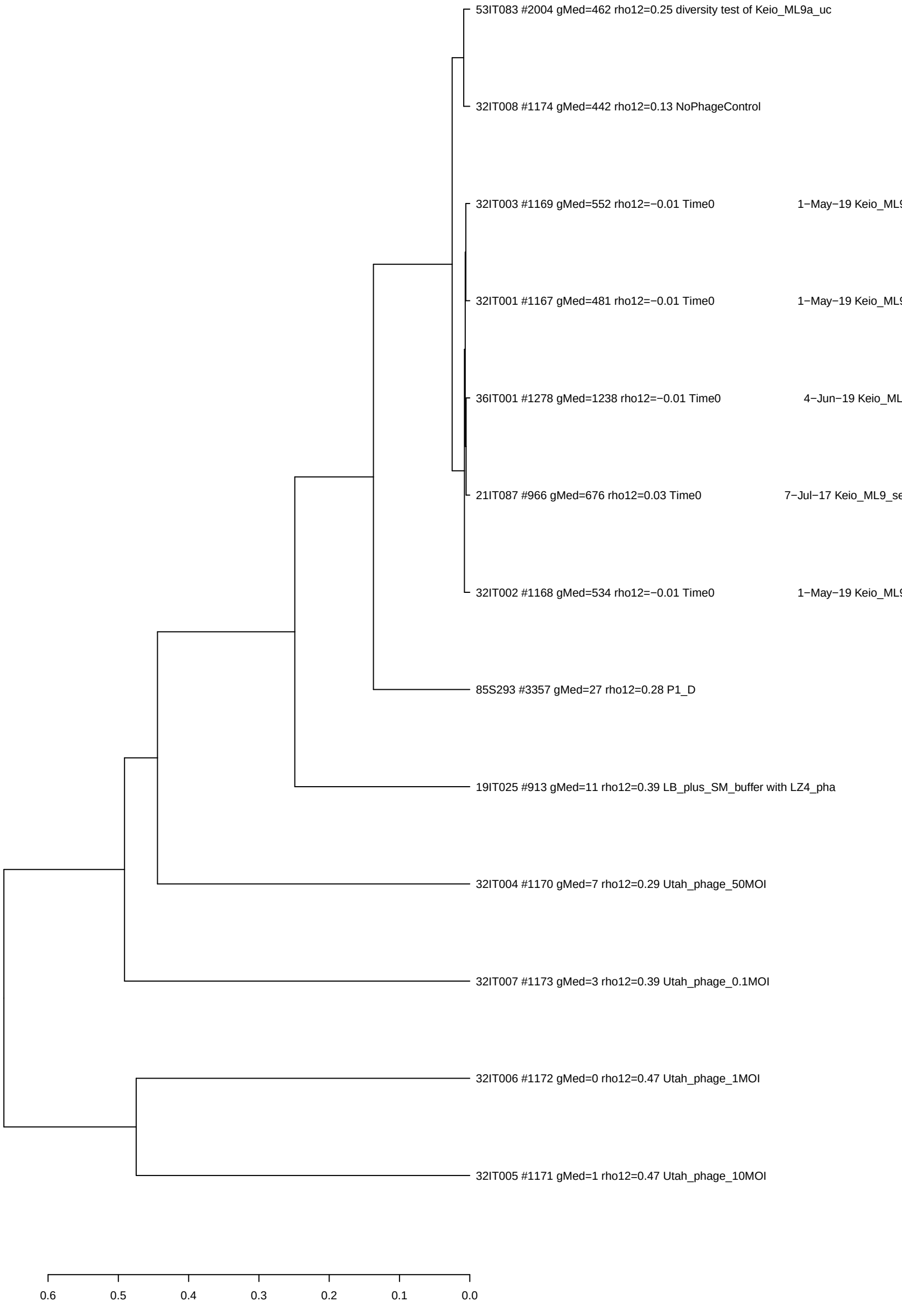
26−Jan−19 Keio_ML9_set30 and similar samples (clustered by log−count)



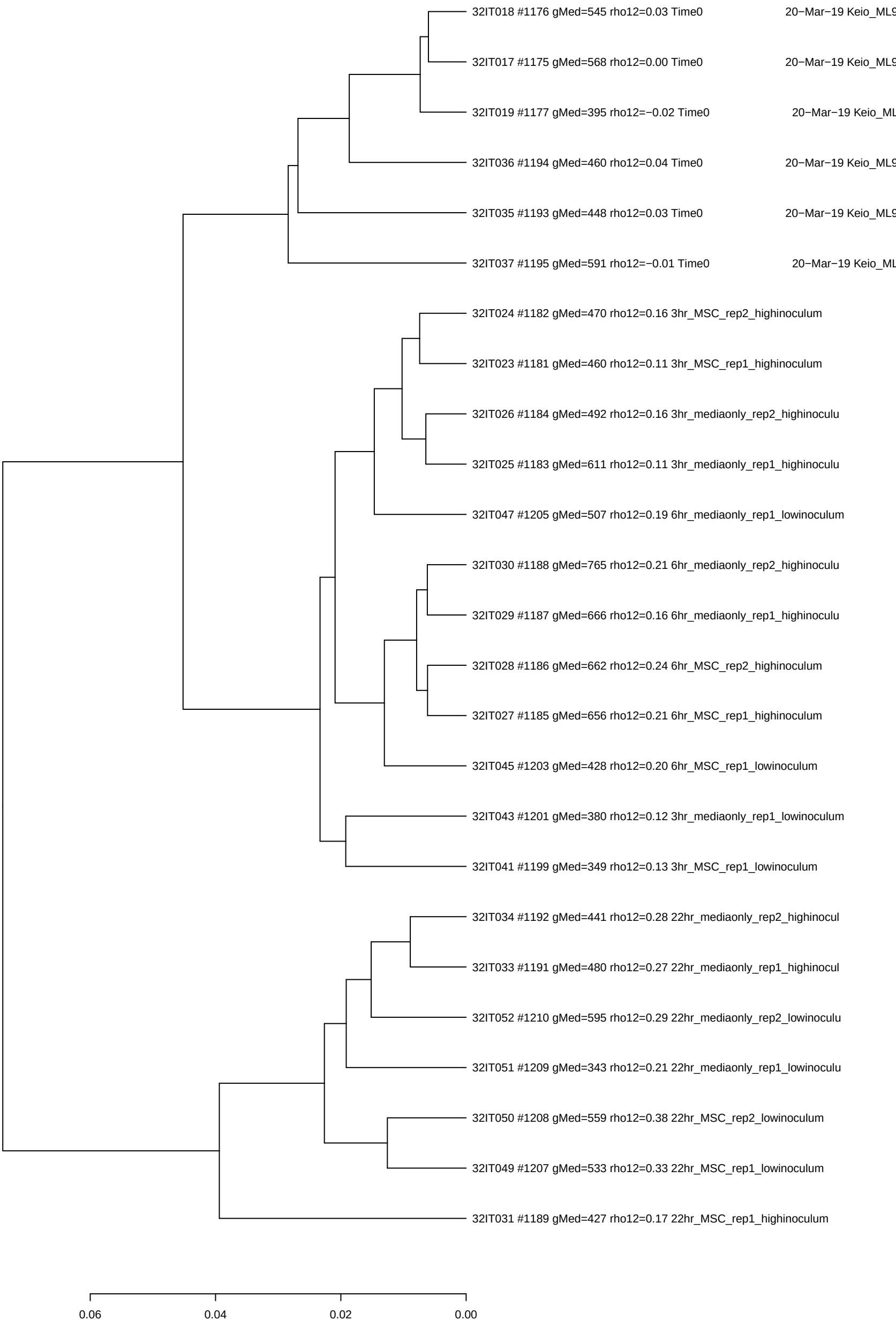
25−Mar−19 Keio_ML9_set31 and similar samples (clustered by log−count)



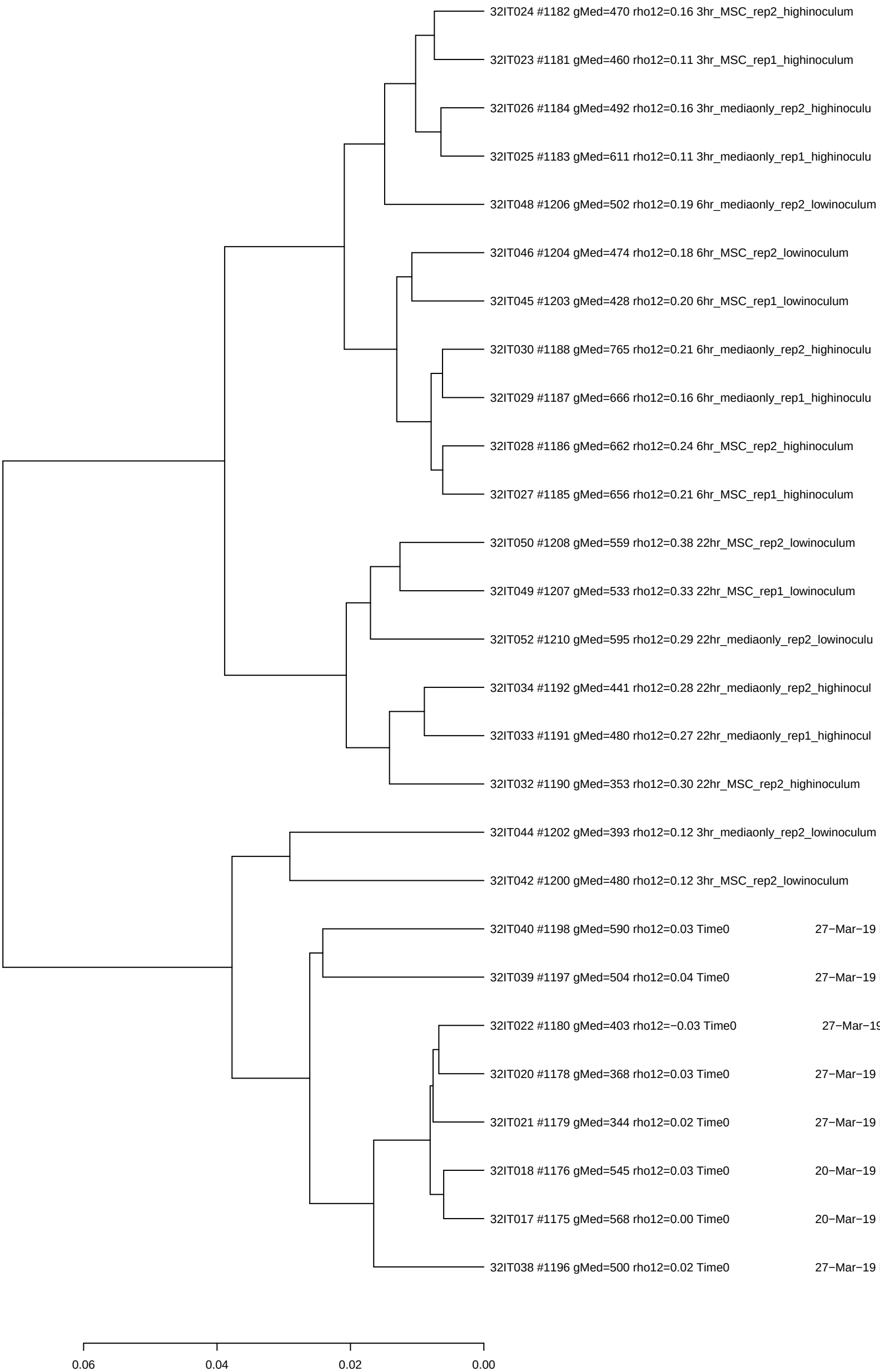
1−May−19 Keio_ML9_set32 and similar samples (clustered by log−count)



20−Mar−19 Keio_ML9_set32 and similar samples (clustered by log−count)



27−Mar−19 Keio_ML9_set32 and similar samples (clustered by log−count)

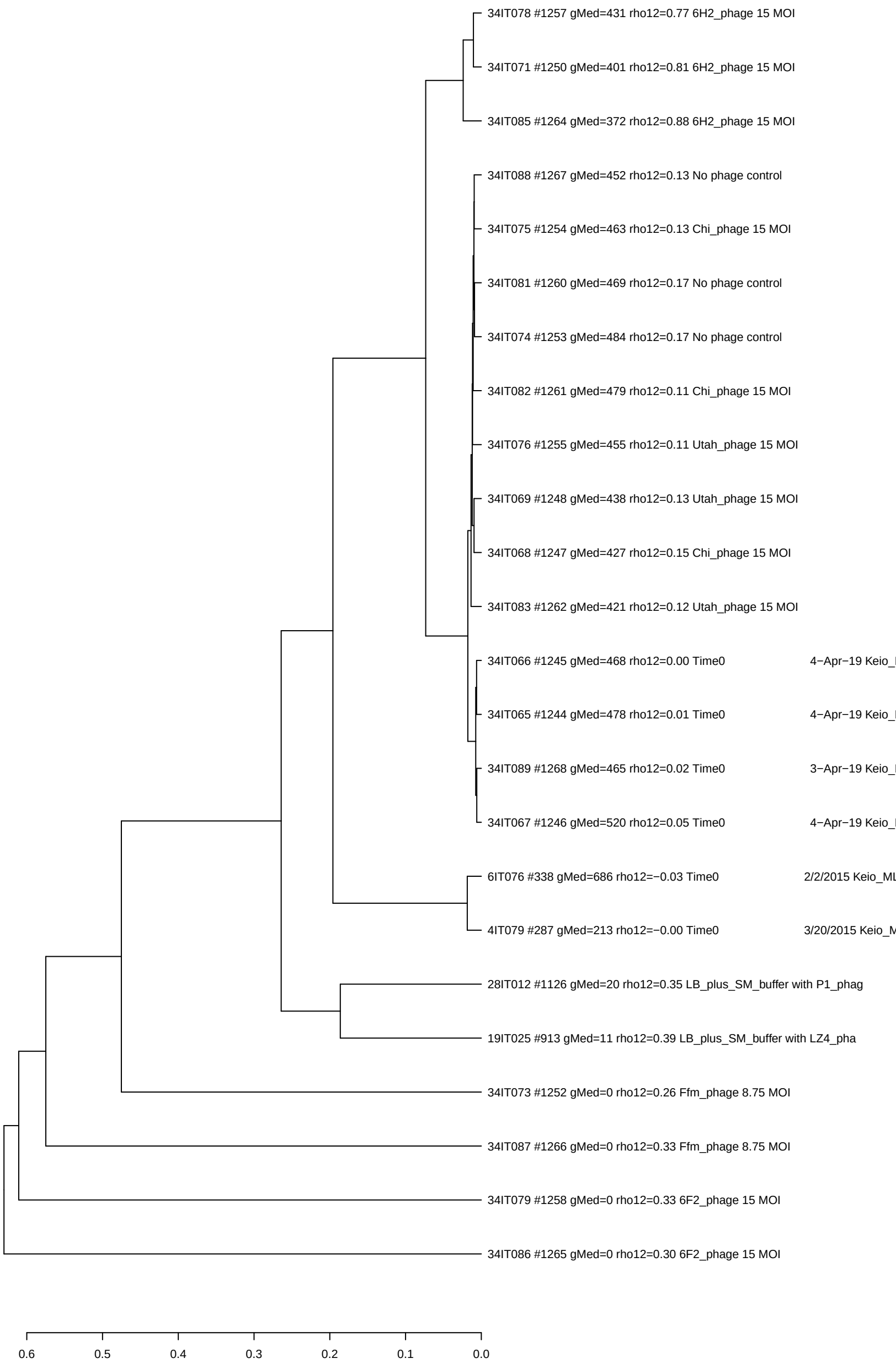


28−May−19 Keio_ML9_set33 and similar samples (clustered by log−count)

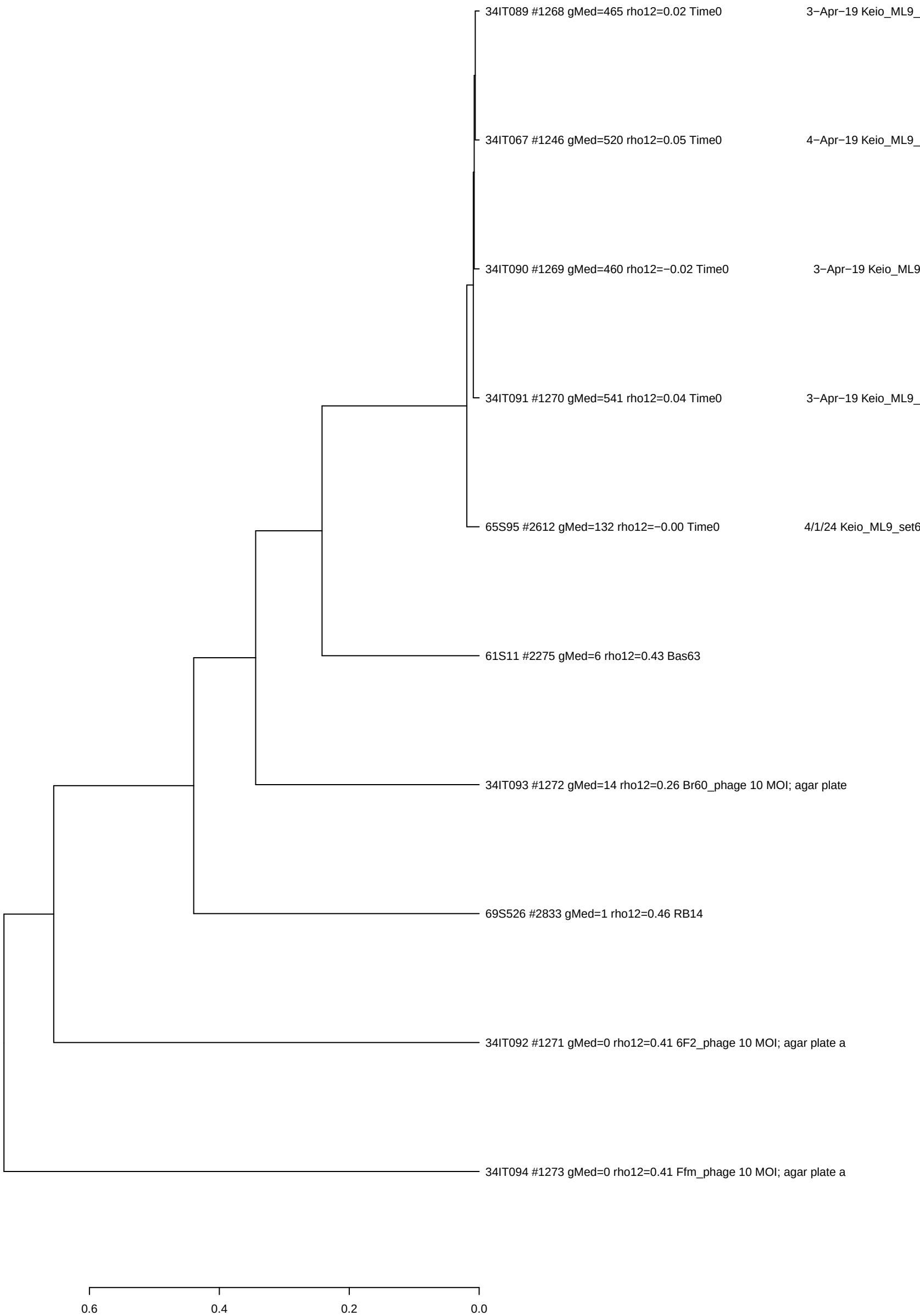
33IT064 #1241 gMed=0 rho12=0.47 20 hr rep2_HD100_10fold_diluti
33IT061 #1238 gMed=0 rho12=0.47 20 hr rep1_HD100_no_dilution_g
61S11 #2275 gMed=6 rho12=0.43 Bas63
8IT026 #387 gMed=7 rho12=0.25 LB Aerobic with Mecillinam 0.0
26IT047 #1107 gMed=447 rho12=0.22 LB 0.5x with Supernatant; Tric
19IT087 #944 gMed=330 rho12=0.09 Papa dilution 10−3 cacl2 malto
33IT056 #1233 gMed=630 rho12=0.15 6 hr rep2_No_BD100_grewON
33IT055 #1232 gMed=614 rho12=0.16 6 hr rep1_No_BD100_grewON
33IT044 #1221 gMed=669 rho12=0.19 3 hr rep2_HD100_10fold_dilutio
33IT043 #1220 gMed=582 rho12=0.19 3 hr rep1_HD100_10fold_dilutio
33IT046 #1223 gMed=578 rho12=0.18 3 hr rep2_No_BD100_grewON
33IT066 #1243 gMed=599 rho12=0.14 20 hr rep2_No_BD100_grewON
33IT065 #1242 gMed=589 rho12=0.15 20 hr rep1_No_BD100_grewON
26IT040 #1100 gMed=417 rho12=0.05 Time0 2−May−18 Keio_ML9_
26IT016 #1076 gMed=448 rho12=0.05 Time0 2−May−18 Keio_ML9_
57IT058 #2178 gMed=403 rho12=0.03 Time0 19−Oct−22 Keio_ML9
38IT002 #1377 gMed=264 rho12=0.01 Time0 25−Oct−19 Keio_ML9
65S167 #2654 gMed=151 rho12=−0.01 Time0 4/11/24 Keio_ML9_se
65S89 #2607 gMed=155 rho12=−0.00 Time0 4/1/24 Keio_ML9_set6
33IT036 #1213 gMed=395 rho12=0.01 Time0 28−May−19 Keio_ML9
32IT003 #1169 gMed=552 rho12=−0.01 Time0 1−May−19 Keio_ML9
52IT044 #1915 gMed=393 rho12=−0.05 Time0 3−Aug−21 Keio_ML9
33IT034 #1211 gMed=448 rho12=−0.01 Time0 28−May−19 Keio_ML
33IT035 #1212 gMed=450 rho12=0.02 Time0 28−May−19 Keio_ML9
64S271 #2513 gMed=77 rho12=0.03 Time0 1/29/24 Keio_ML9_set6
33IT040 #1217 gMed=423 rho12=0.01 3 hr rep2_HD100_10fold_dilutio
33IT039 #1216 gMed=436 rho12=0.01 3 hr rep1_HD100_10fold_dilutio
33IT054 #1231 gMed=691 rho12=0.12 6 hr rep2_HD100_10fold_dilutio
33IT053 #1230 gMed=544 rho12=0.12 6 hr rep1_HD100_10fold_dilutio
13IT050 #729 gMed=25 rho12=0.04 Nickel (II) chloride 2 mM
33IT037 #1214 gMed=330 rho12=0.07 3 hr rep1_HD100_no_dilution
33IT038 #1215 gMed=234 rho12=0.04 3 hr rep2_HD100_no_dilution
33IT050 #1227 gMed=142 rho12=0.05 6 hr rep2_HD100_10fold_dilutio
33IT049 #1226 gMed=182 rho12=0.10 6 hr rep1_HD100_10fold_dilutio
33IT041 #1218 gMed=339 rho12=0.12 3 hr rep1_HD100_no_dilution_gr
16IT017 #770 gMed=2 rho12=0.48 T2_phage 1.875 MOI
33IT042 #1219 gMed=416 rho12=0.13 3 hr rep2_HD100_no_dilution_gr
33IT062 #1239 gMed=363 rho12=0.14 20 hr rep2_HD100_no_dilution_g
33IT045 #1222 gMed=0 rho12=0.47 3 hr rep1_No_BD100_grewON
33IT051 #1228 gMed=0 rho12=0.36 6 hr rep1_HD100_no_dilution_gr
33IT052 #1229 gMed=0 rho12=0.35 6 hr rep2_HD100_no_dilution_gr
33IT063 #1240 gMed=0 rho12=0.34 20 hr rep1_HD100_10fold_diluti

0.8 0.6 0.4 0.2 0.0

4−Apr−19 Keio_ML9_set34 and similar samples (clustered by log−count)



3−Apr−19 Keio_ML9_set34 and similar samples (clustered by log−count)



14−Mar−19 Keio_ML9_set35 and similar samples (clustered by log−count)

61S617 #2359 gMed=378 rho12=0.01 Time0 8/3/23 Keio_ML9_set6

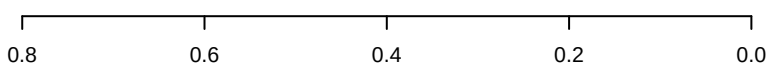
26IT040 #1100 gMed=417 rho12=0.05 Time0 2−May−18 Keio_ML9_

35IT048 #1276 gMed=514 rho12=0.01 Time0 14−Mar−19 Keio_ML9

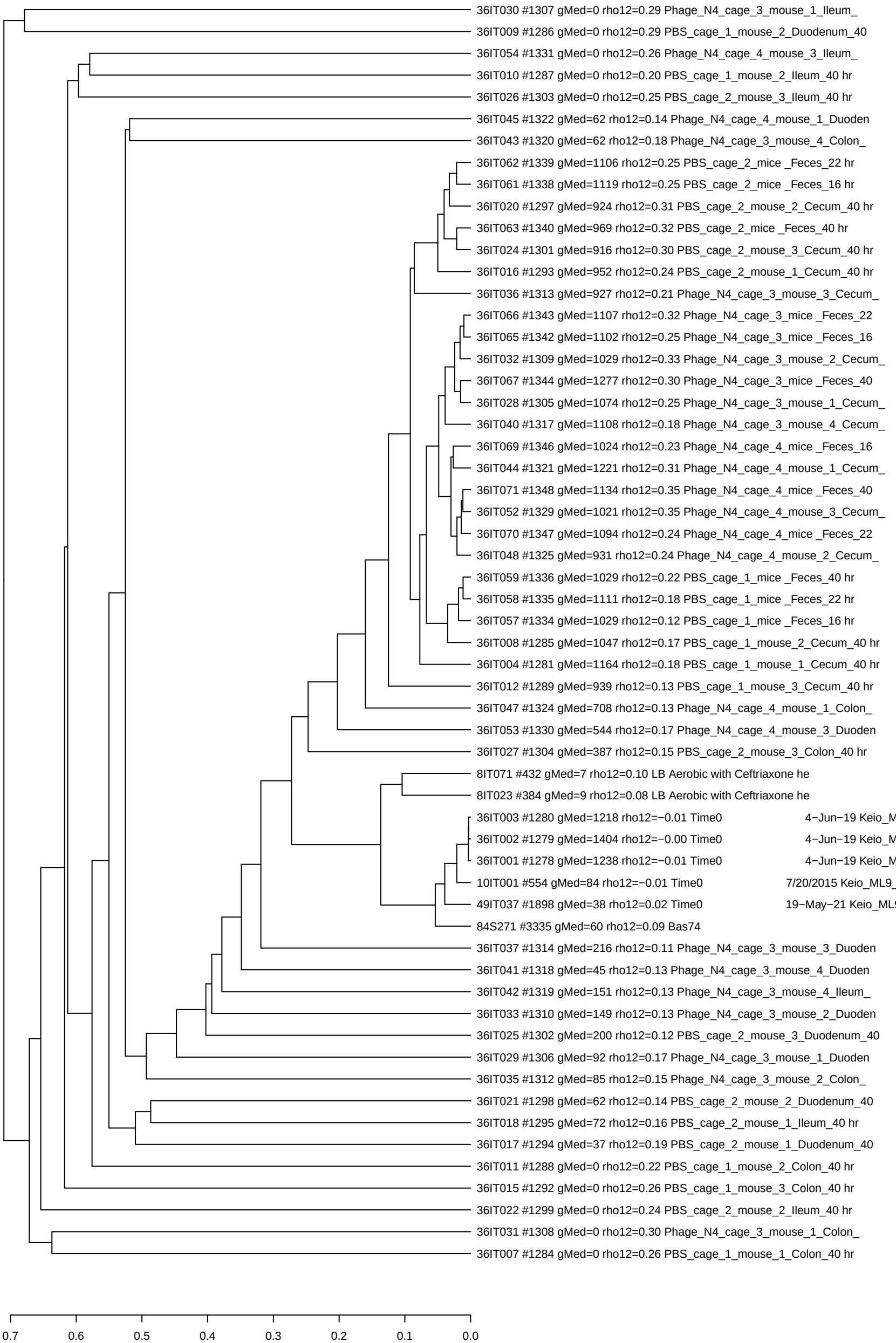
35IT049 #1277 gMed=597 rho12=0.01 Time0 14−Mar−19 Keio_ML9

19IT015 #903 gMed=0 rho12=0.49 LB_plus_SM_buffer with T5_phag

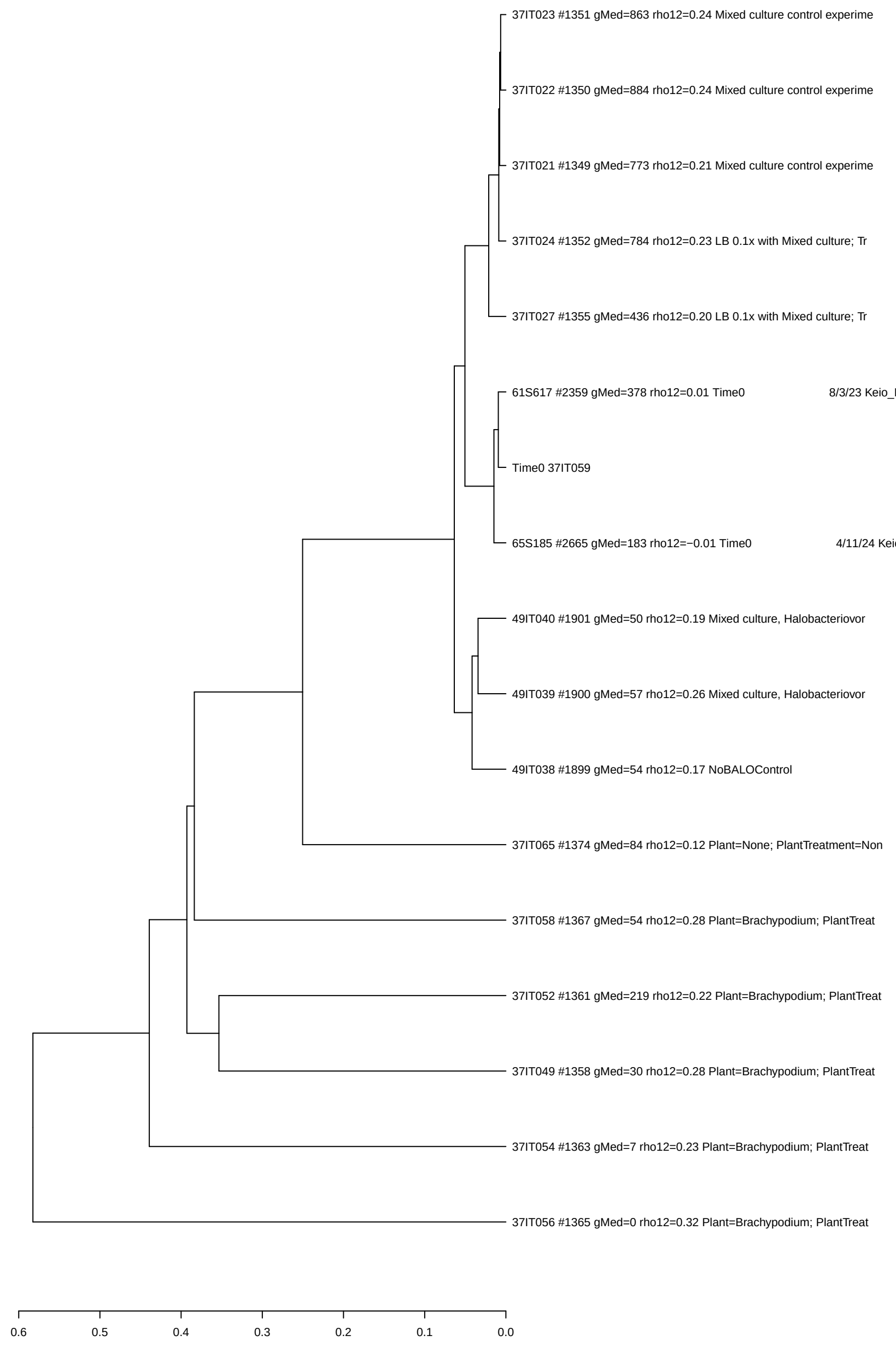
35IT033 #1275 gMed=0 rho12=0.48 Plant=Brachypodium; PlantTreat



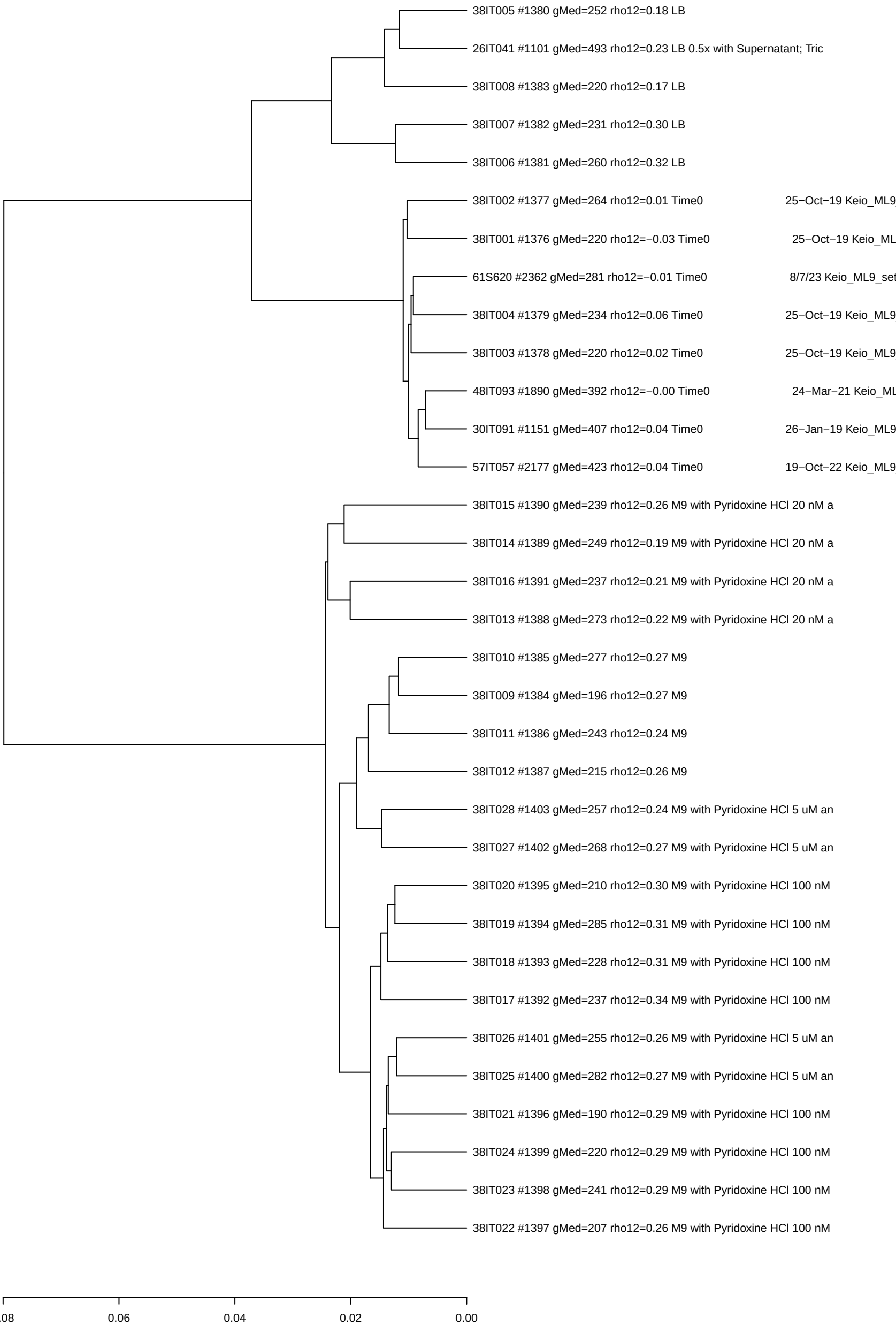
4−Jun−19 Keio_ML9_set36 and similar samples (clustered by log−count)



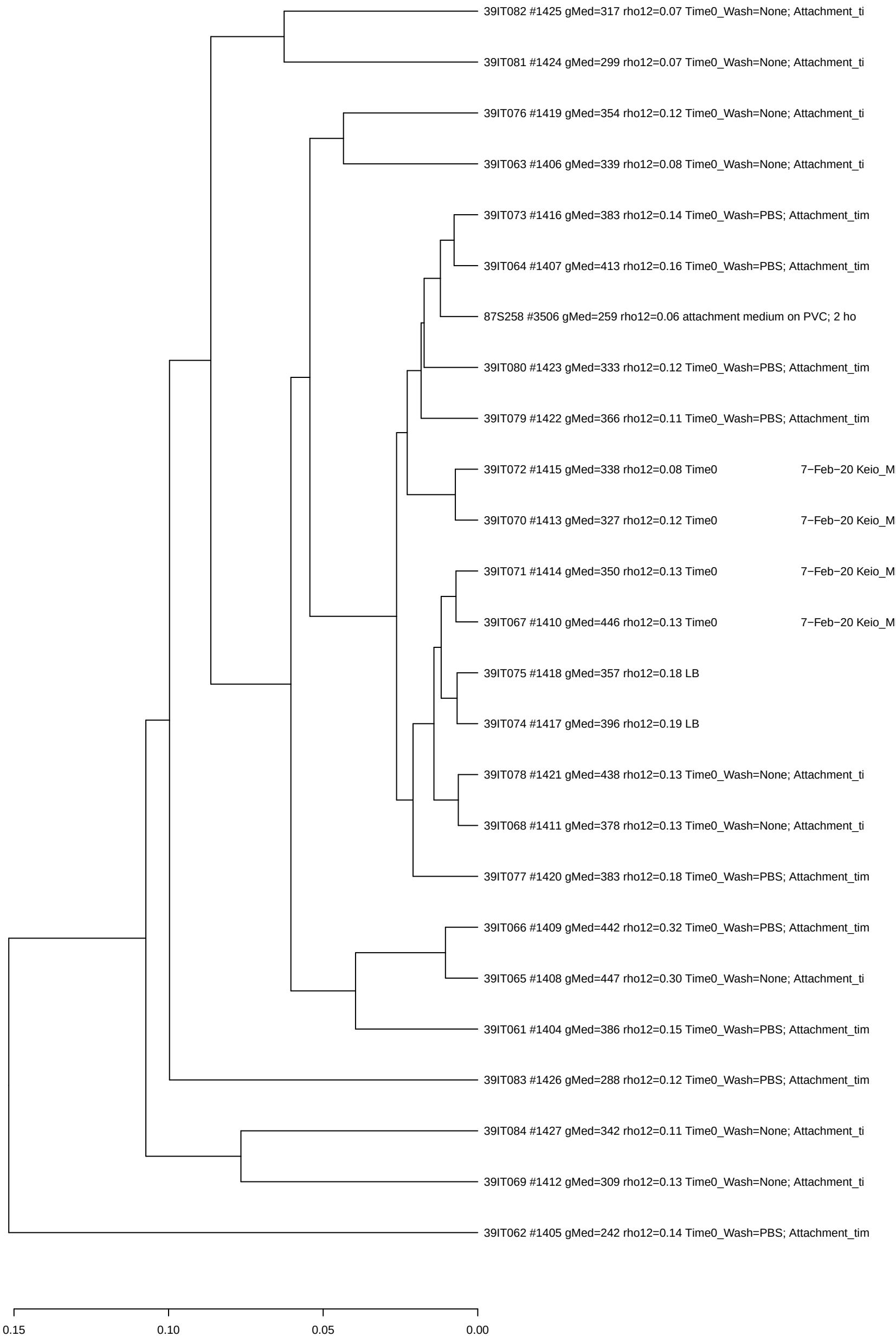
25−Jun−19 Keio_ML9_set37 and similar samples (clustered by log−count)



25−Oct−19 Keio_ML9_set38 and similar samples (clustered by log−count)



7−Feb−20 Keio_ML9_set39 and similar samples (clustered by log−count)



10−Aug−20 Keio_ML9_set40 and similar samples (clustered by log−count)

40IT071 #1446 gMed=255 rho12=0.21 carbon source D−Mannose 5mM
40IT061 #1436 gMed=270 rho12=0.22 carbon source D−Glucose 5mM
40IT069 #1444 gMed=110 rho12=0.21 carbon source D−Glucose 5mM
57IT058 #2178 gMed=403 rho12=0.03 Time0 19−Oct−22 Keio_ML9
57IT057 #2177 gMed=423 rho12=0.04 Time0 19−Oct−22 Keio_ML9
30IT049 #1133 gMed=411 rho12=0.01 Time0 28−Jan−19 Keio_ML9
26IT016 #1076 gMed=448 rho12=0.05 Time0 2−May−18 Keio_ML9_
40IT054 #1429 gMed=472 rho12=0.16 Time0 10−Aug−20 Keio_ML9
40IT055 #1430 gMed=484 rho12=0.08 Time0 10−Aug−20 Keio_ML9
40IT056 #1431 gMed=455 rho12=0.14 Time0 10−Aug−20 Keio_ML9
40IT053 #1428 gMed=360 rho12=0.11 Time0 10−Aug−20 Keio_ML9
40IT078 #1453 gMed=277 rho12=0.19 carbon source D−Glucose 0.25mM
40IT077 #1452 gMed=330 rho12=0.22 carbon source D−Glucose 0.25mM
40IT074 #1449 gMed=458 rho12=0.33 carbon source D−Glucose 1mM
40IT073 #1448 gMed=393 rho12=0.31 carbon source D−Glucose 1mM
52IT054 #1925 gMed=467 rho12=0.36 Carbon source D−Glucose 10 mM
52IT050 #1921 gMed=472 rho12=0.34 Carbon source D−Glucose 10 mM
52IT051 #1922 gMed=435 rho12=0.33 Carbon source D−Mannitol 10 mM
40IT076 #1451 gMed=449 rho12=0.33 carbon source D−Glucose 0.5mM
40IT075 #1450 gMed=432 rho12=0.27 carbon source D−Glucose 0.5mM
40IT088 #1463 gMed=391 rho12=0.23 carbon source D−Mannose 0.5mM
67S91 #2801 gMed=116 rho12=0.27 HMW_DNA_from_Lysinibacillus_FW
40IT067 #1442 gMed=482 rho12=0.31 carbon source D−Mannose 20mM
40IT059 #1434 gMed=388 rho12=0.34 carbon source D−Mannose 20mM
40IT063 #1438 gMed=384 rho12=0.30 carbon source D−Mannose 5mM
40IT065 #1440 gMed=403 rho12=0.31 carbon source D−Glucose 20mM
40IT057 #1432 gMed=375 rho12=0.32 carbon source D−Glucose 20mM
40IT086 #1461 gMed=326 rho12=0.28 carbon source D−Mannose 1mM
40IT085 #1460 gMed=347 rho12=0.22 carbon source D−Mannose 1mM
40IT087 #1462 gMed=294 rho12=0.19 carbon source D−Mannose 0.5mM
40IT089 #1464 gMed=228 rho12=0.14 carbon source D−Mannose 0.25mM
40IT090 #1465 gMed=39 rho12=0.14 carbon source D−Mannose 0.25mM

0.25 0.20 0.15 0.10 0.05 0.00

21−Oct−20 Keio_ML9_set41 and similar samples (clustered by log−count)

41IT061 #1504 gMed=424 rho12=0.02 LB + carbenicillin 0hr
41IT049 #1494 gMed=667 rho12=0.35 LB + carbenicillin 0hr
41IT013 #1483 gMed=641 rho12=0.05 Time0 21−Oct−20 Keio_ML9
41IT001 #1472 gMed=620 rho12=0.05 Time0 21−Oct−20 Keio_ML9
41IT062 #1505 gMed=723 rho12=0.12 LB Time1hr
41IT050 #1495 gMed=693 rho12=0.09 LB Time1hr
41IT063 #1506 gMed=774 rho12=0.11 LB + ciprofloxacin Time1−2hr
41IT051 #1496 gMed=774 rho12=0.14 LB + ciprofloxacin Time1−2hr
41IT014 #1484 gMed=550 rho12=0.07 LB + ciprofloxacin Time0
41IT002 #1473 gMed=598 rho12=0.04 LB + ciprofloxacin Time0
41IT015 #1485 gMed=575 rho12=0.19 LB + carbenicillin Time1−2hr
41IT003 #1474 gMed=450 rho12=0.12 LB + carbenicillin Time1−2hr
41IT064 #1507 gMed=756 rho12=0.21 LB + carbenicillin Time3hr
41IT052 #1497 gMed=633 rho12=0.13 LB + carbenicillin Time3hr
41IT018 #1488 gMed=674 rho12=0.21 LB + carbenicillin Time4hr
41IT006 #1477 gMed=654 rho12=0.22 LB + carbenicillin Time4hr
42IT003 #1516 gMed=772 rho12=0.23 LB + carbenicillin Time9hr
41IT058 #1503 gMed=825 rho12=0.29 LB + carbenicillin Time7hr
41IT070 #1513 gMed=751 rho12=0.27 LB + carbenicillin Time7hr
41IT021 #1491 gMed=728 rho12=0.29 LB + carbenicillin Time6hr
41IT055 #1500 gMed=772 rho12=0.25 LB + carbenicillin Time5hr
41IT009 #1480 gMed=739 rho12=0.24 LB + carbenicillin Time6hr
41IT067 #1510 gMed=717 rho12=0.29 LB + carbenicillin Time5hr
41IT011 #1482 gMed=640 rho12=0.24 LB + ciprofloxacin Time7hr
41IT007 #1478 gMed=732 rho12=0.27 LB Time5hr
41IT010 #1481 gMed=672 rho12=0.22 LB Time7hr
41IT020 #1490 gMed=703 rho12=0.24 LB + ciprofloxacin Time5hr
41IT019 #1489 gMed=710 rho12=0.23 LB Time5hr
42IT002 #1515 gMed=901 rho12=0.26 LB + ciprofloxacin Time8hr
41IT023 #1493 gMed=720 rho12=0.25 LB + ciprofloxacin Time7hr
42IT017 #1526 gMed=937 rho12=0.25 LB + ciprofloxacin Time24hr
42IT005 #1518 gMed=981 rho12=0.24 LB + ciprofloxacin Time24hr
41IT068 #1511 gMed=737 rho12=0.29 LB Time6hr
41IT057 #1502 gMed=851 rho12=0.28 LB + ciprofloxacin Time6hr
41IT056 #1501 gMed=774 rho12=0.28 LB Time6hr
41IT066 #1509 gMed=833 rho12=0.25 LB + ciprofloxacin Time4hr
41IT054 #1499 gMed=812 rho12=0.24 LB + ciprofloxacin Time4hr
41IT069 #1512 gMed=713 rho12=0.26 LB + ciprofloxacin Time6hr
41IT022 #1492 gMed=731 rho12=0.24 LB Time7hr
41IT008 #1479 gMed=791 rho12=0.21 LB + ciprofloxacin Time5hr
41IT016 #1486 gMed=630 rho12=0.17 LB Time3hr
41IT004 #1475 gMed=701 rho12=0.18 LB Time3hr
41IT017 #1487 gMed=682 rho12=0.17 LB + ciprofloxacin Time3hr
41IT005 #1476 gMed=774 rho12=0.21 LB + ciprofloxacin Time3hr
41IT065 #1508 gMed=733 rho12=0.32 LB Time4hr
41IT053 #1498 gMed=831 rho12=0.23 LB Time4hr

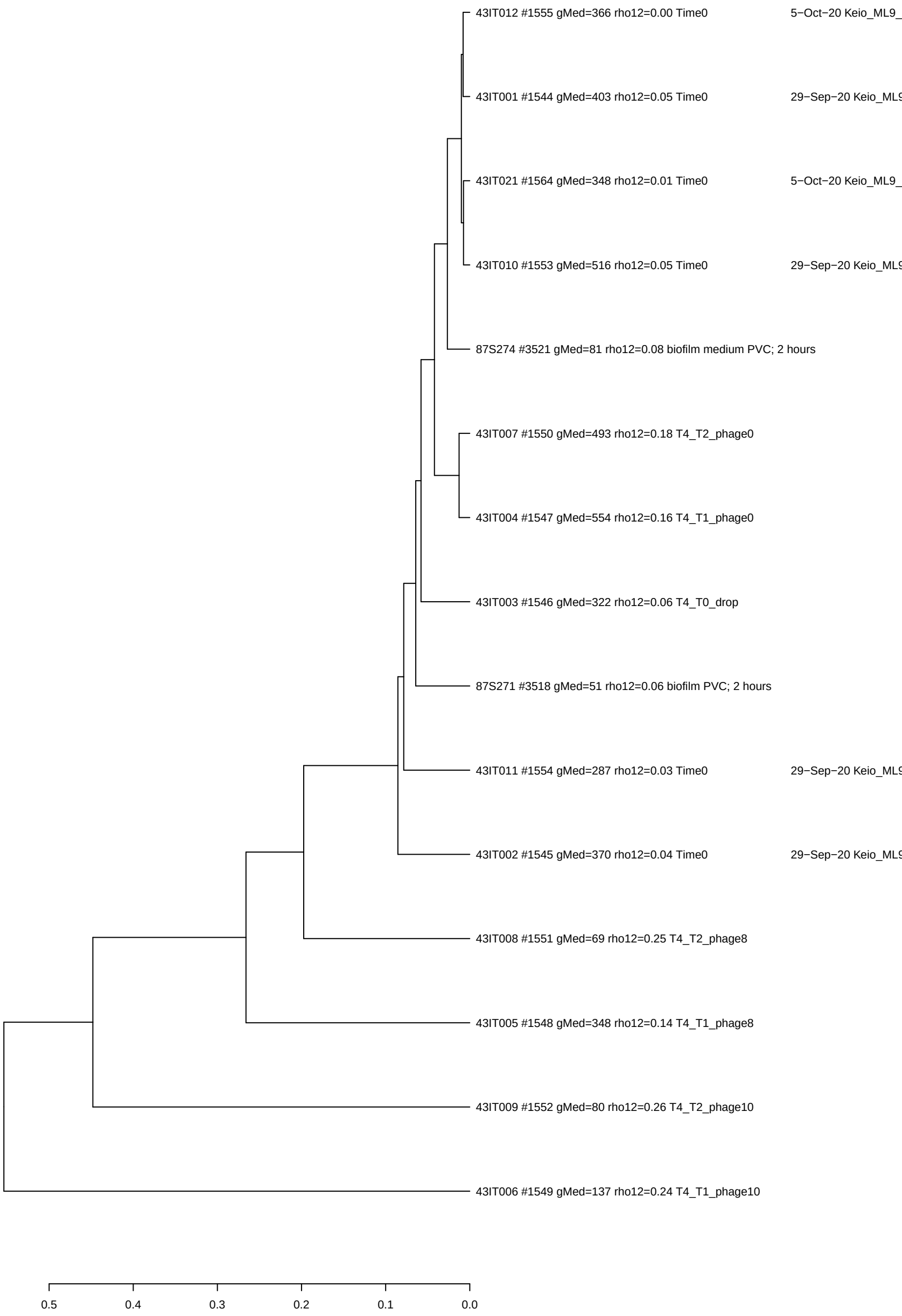
0.04 0.03 0.02 0.01 0.00

21−Oct−20 and similar samples (clustered by log−count)

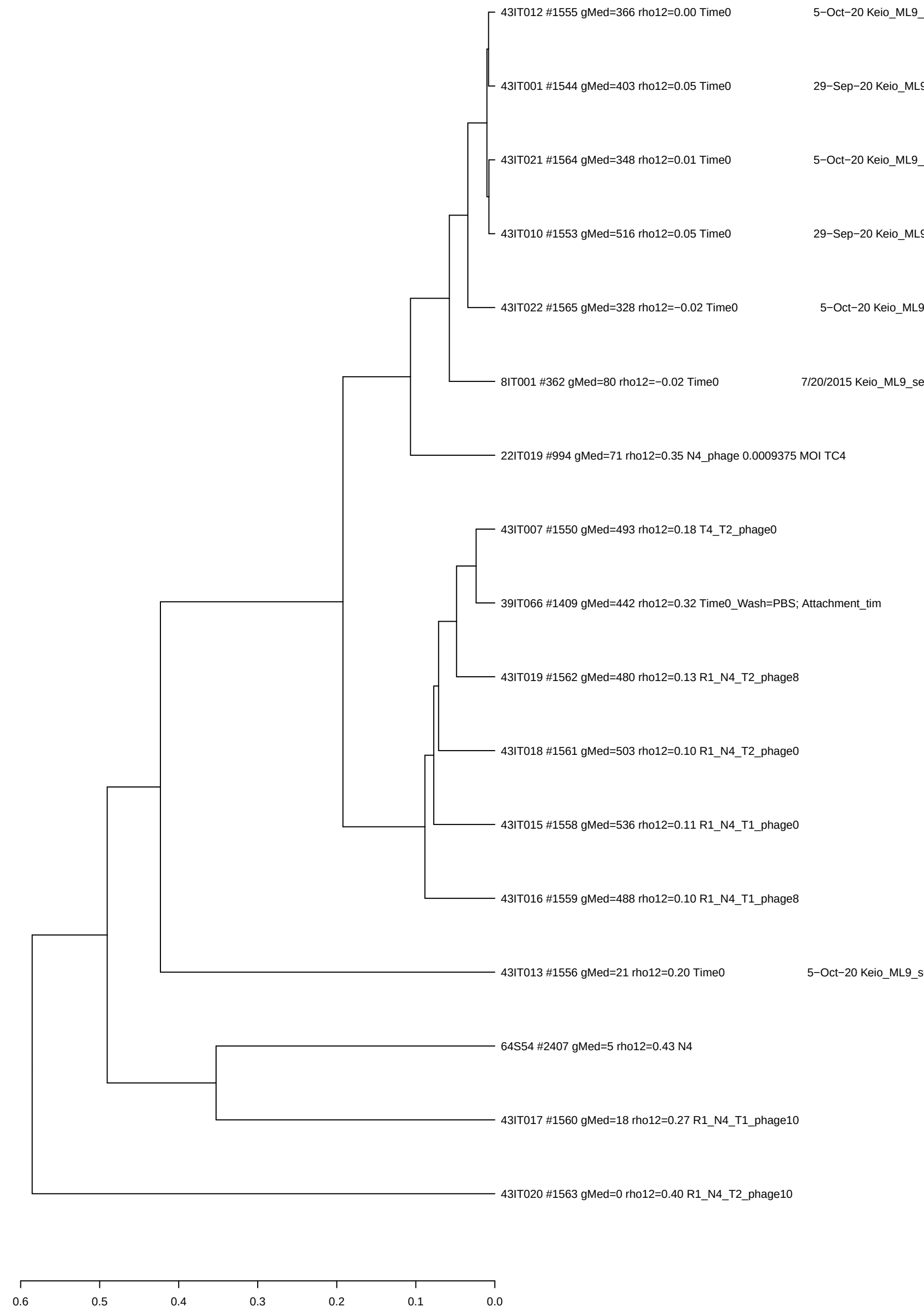
42IT014 #1523 gMed=910 rho12=0.24 LB + ciprofloxacin Time8hr
42IT005 #1518 gMed=981 rho12=0.24 LB + ciprofloxacin Time24hr
42IT017 #1526 gMed=937 rho12=0.25 LB + ciprofloxacin Time24hr
42IT004 #1517 gMed=935 rho12=0.27 LB Time24hr
42IT013 #1522 gMed=872 rho12=0.23 LB Time8hr
42IT002 #1515 gMed=901 rho12=0.26 LB + ciprofloxacin Time8hr
42IT016 #1525 gMed=852 rho12=0.27 LB Time24hr
42IT050 #1531 gMed=687 rho12=0.22 LB Time9hr
41IT020 #1490 gMed=703 rho12=0.24 LB + ciprofloxacin Time5hr
42IT062 #1538 gMed=1053 rho12=0.23 LB Time9hr
42IT051 #1532 gMed=1021 rho12=0.23 LB + ciprofloxacin Time9hr
42IT063 #1539 gMed=1039 rho12=0.24 LB + ciprofloxacin Time9hr
42IT053 #1534 gMed=1031 rho12=0.26 LB Time48hr
42IT065 #1541 gMed=951 rho12=0.25 LB Time48hr
42IT054 #1535 gMed=1013 rho12=0.28 LB + ciprofloxacin Time48hr
42IT066 #1542 gMed=1041 rho12=0.29 LB + ciprofloxacin Time48hr
42IT001 #1514 gMed=923 rho12=0.26 LB Time8hr
42IT019 #1528 gMed=898 rho12=0.36 LB regrowth after 48hrs
42IT007 #1520 gMed=941 rho12=0.37 LB regrowth after 48hrs
42IT008 #1521 gMed=994 rho12=0.35 LB + ciprofloxacin regrowth af
42IT015 #1524 gMed=922 rho12=0.26 LB + carbenicillin Time9hr
41IT058 #1503 gMed=825 rho12=0.29 LB + carbenicillin Time7hr
42IT061 #1537 gMed=676 rho12=0.23 LB + carbenicillin Time8hr
42IT003 #1516 gMed=772 rho12=0.23 LB + carbenicillin Time9hr
42IT049 #1530 gMed=1038 rho12=0.24 LB + carbenicillin Time8hr
42IT064 #1540 gMed=1019 rho12=0.26 LB + carbenicillin Time24hr
42IT052 #1533 gMed=962 rho12=0.27 LB + carbenicillin Time24hr
42IT018 #1527 gMed=879 rho12=0.30 LB + carbenicillin Time48hr
42IT006 #1519 gMed=927 rho12=0.28 LB + carbenicillin Time48hr
42IT067 #1543 gMed=929 rho12=0.37 LB + carbenicillin regrowth af
42IT055 #1536 gMed=965 rho12=0.40 LB + carbenicillin regrowth af

0.03 0.02 0.01 0.00

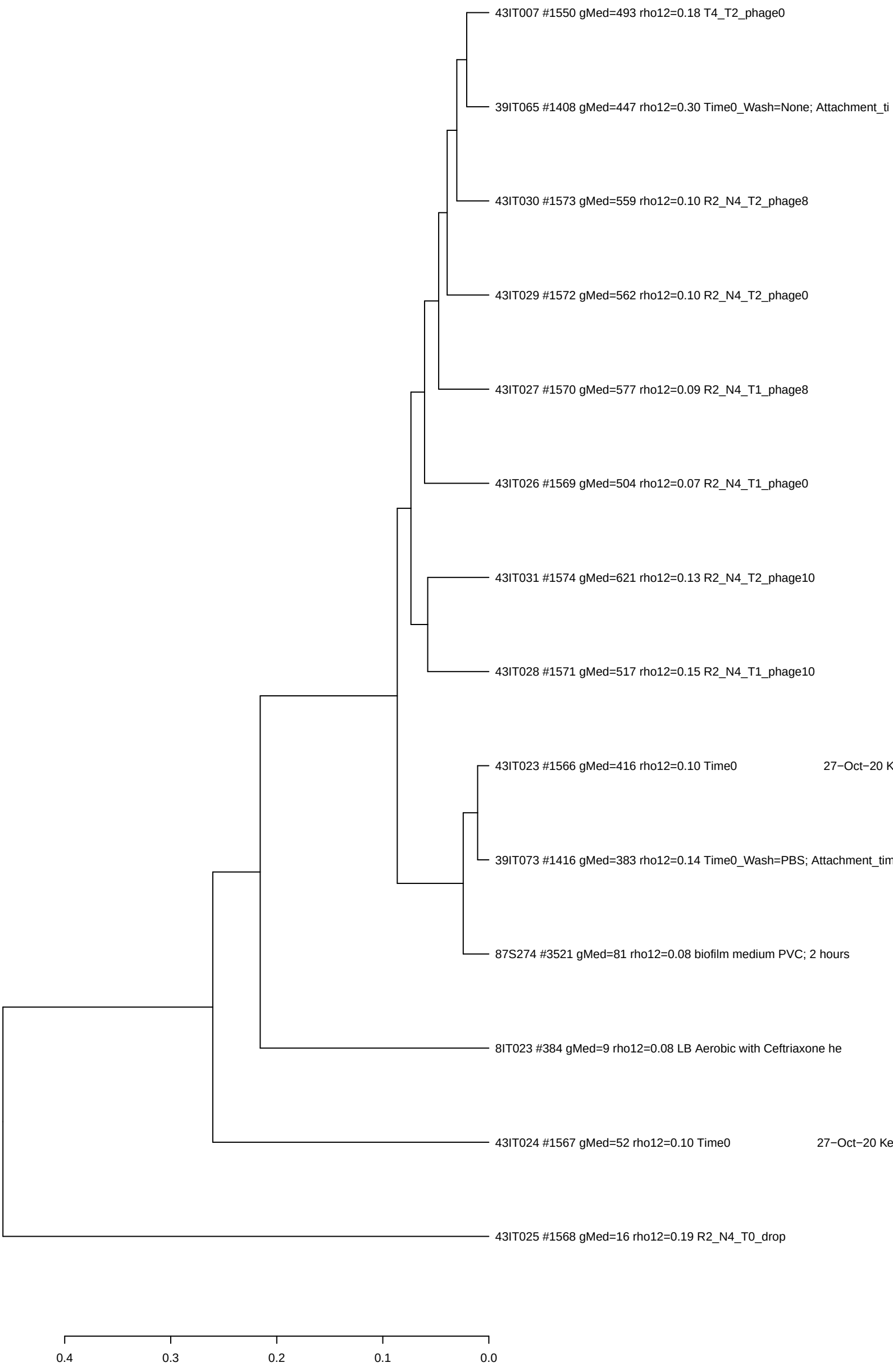
29−Sep−20 Keio_ML9_set43 and similar samples (clustered by log−count)



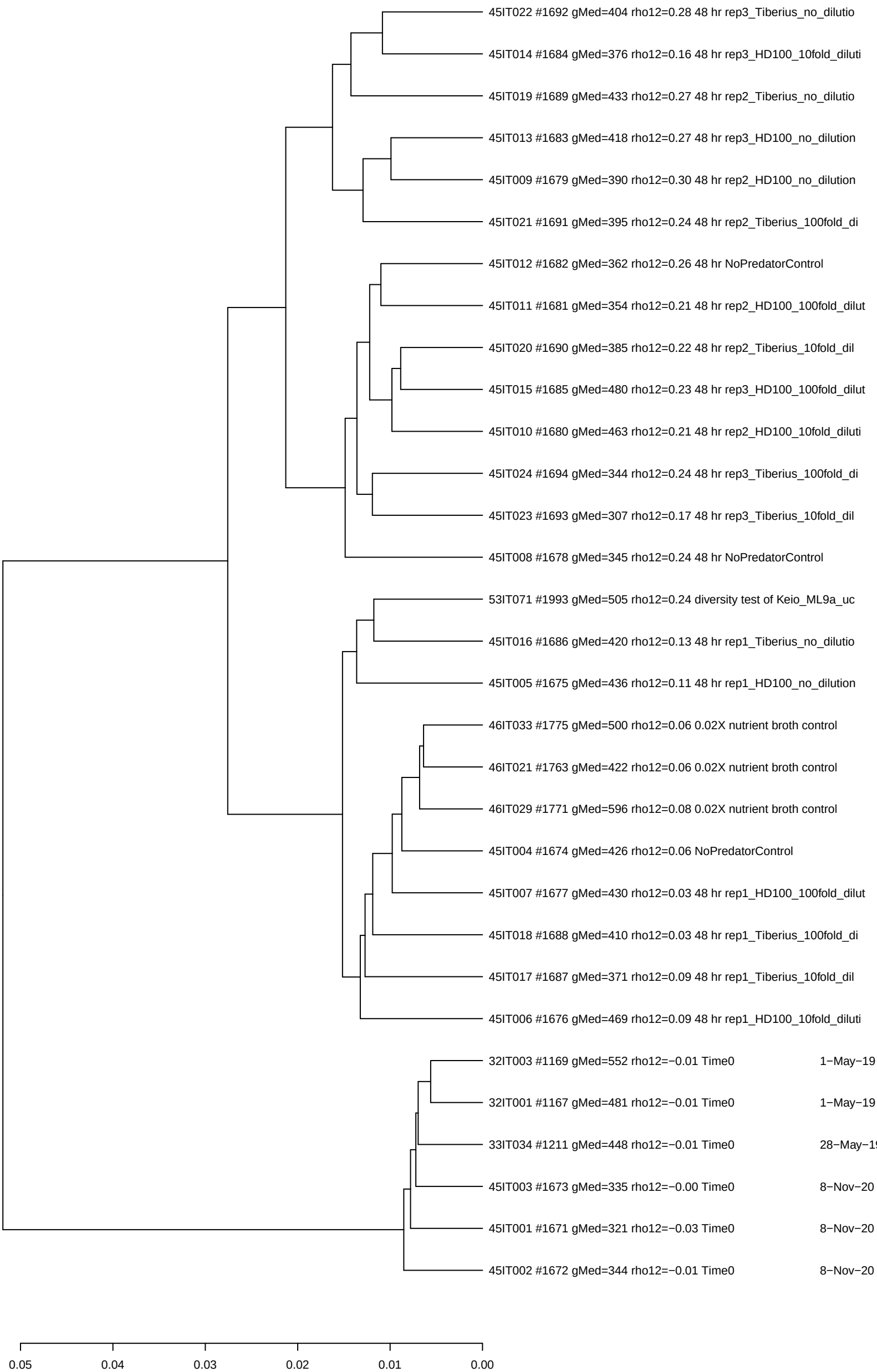
5−Oct−20 Keio_ML9_set43 and similar samples (clustered by log−count)



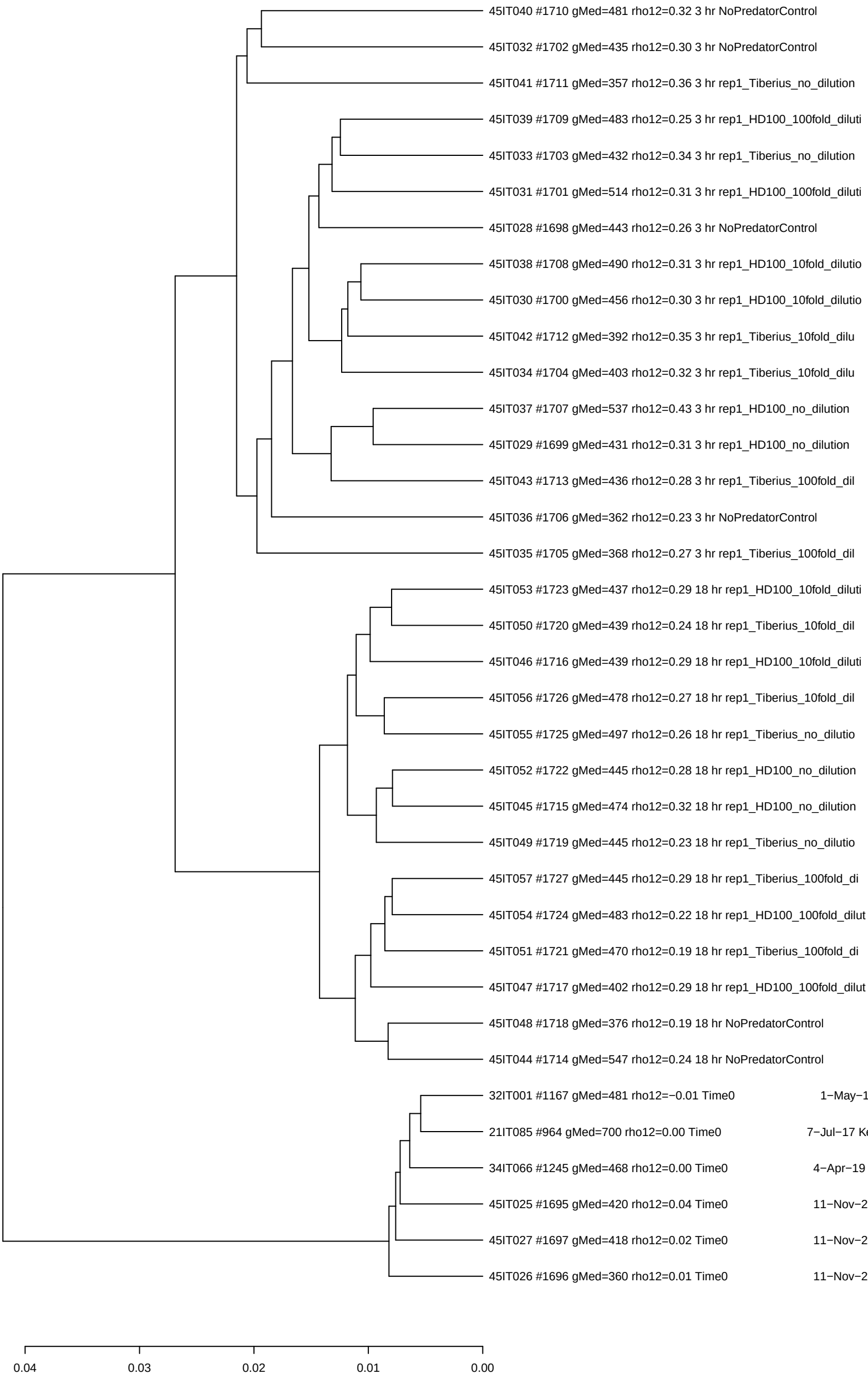
27−Oct−20 Keio_ML9_set43 and similar samples (clustered by log−count)



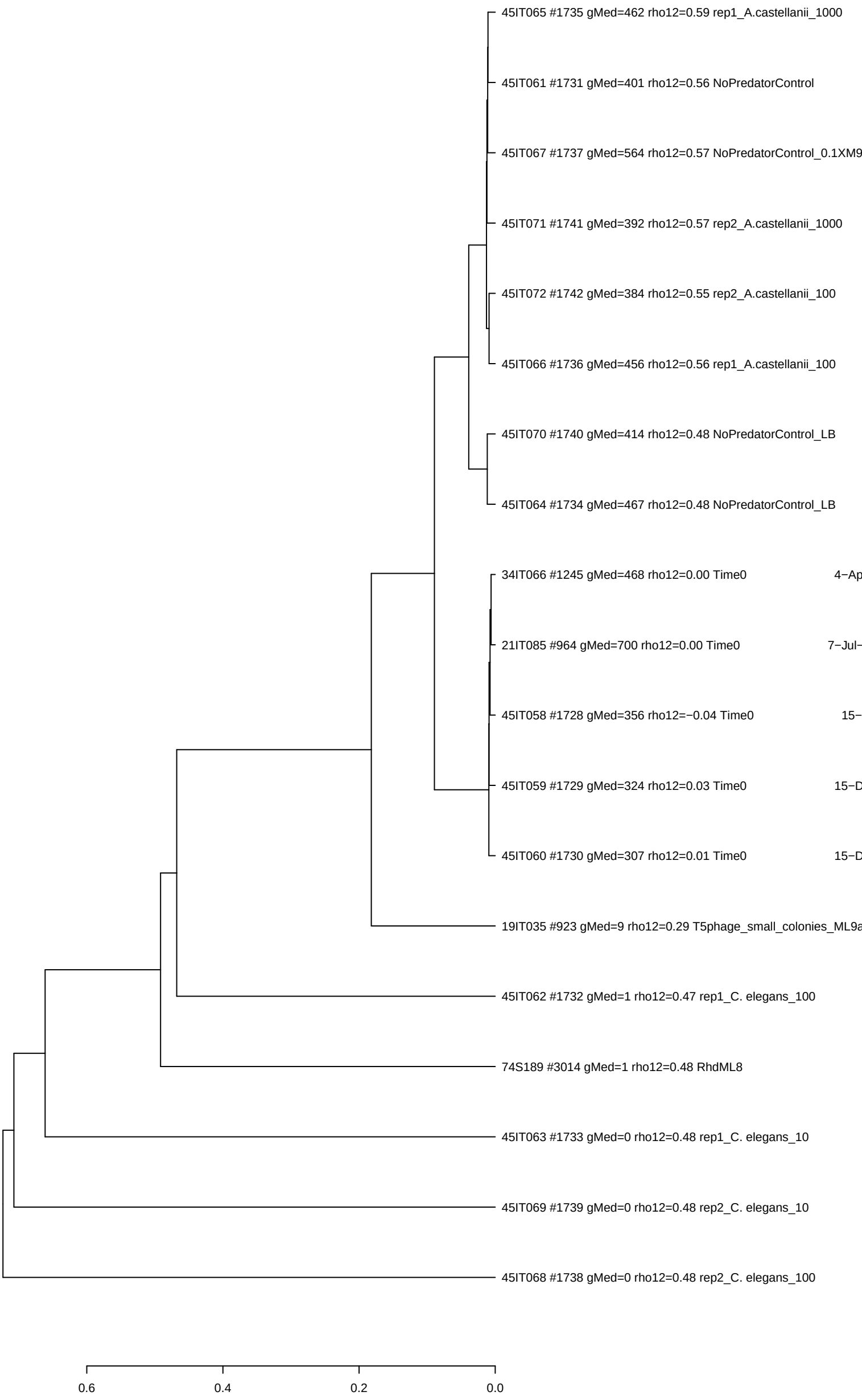
8−Nov−20 Keio_ML9_set45 and similar samples (clustered by log−count)



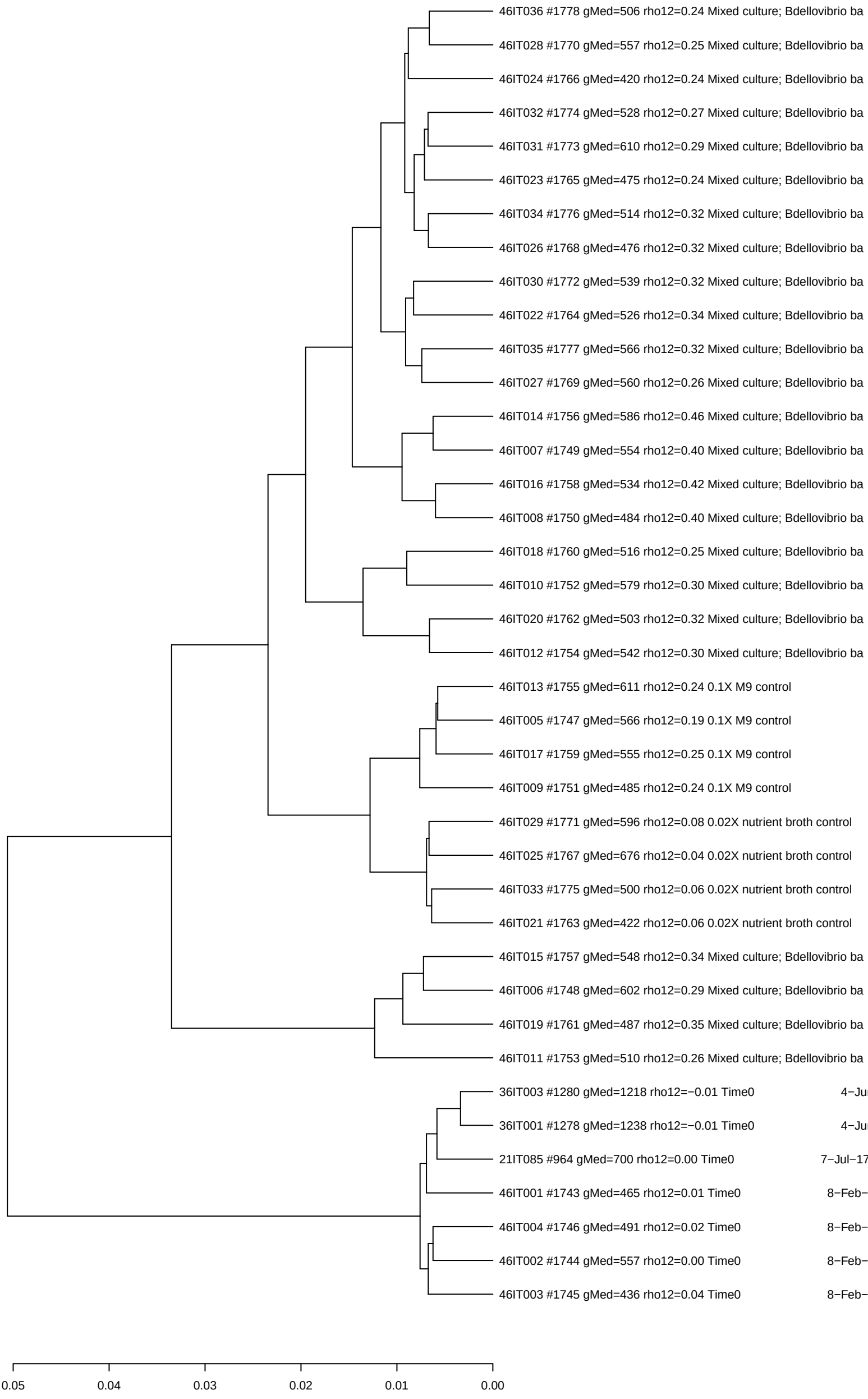
11−Nov−20 Keio_ML9_set45 and similar samples (clustered by log−count)



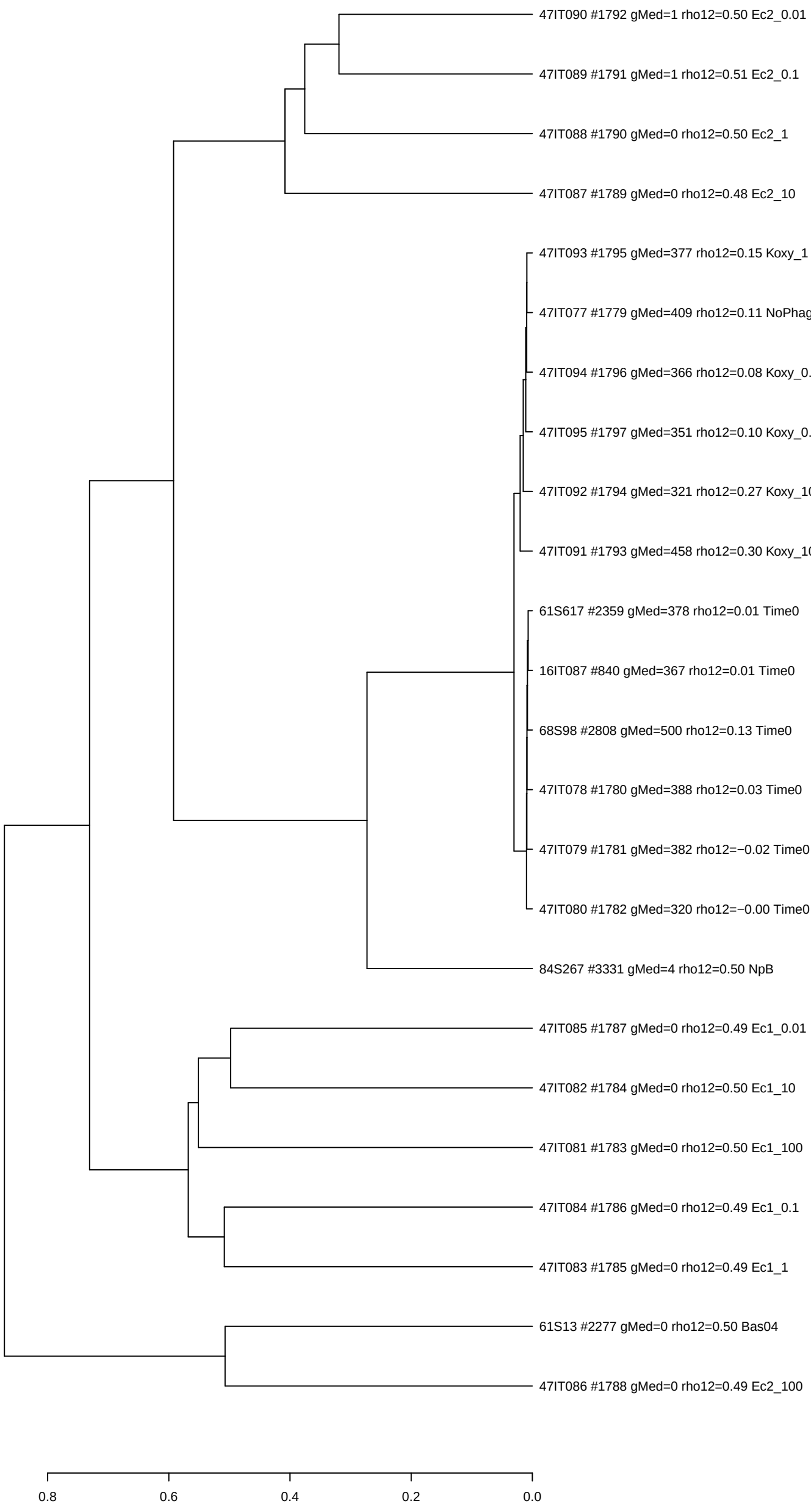
15−Dec−20 Keio_ML9_set45 and similar samples (clustered by log−count)

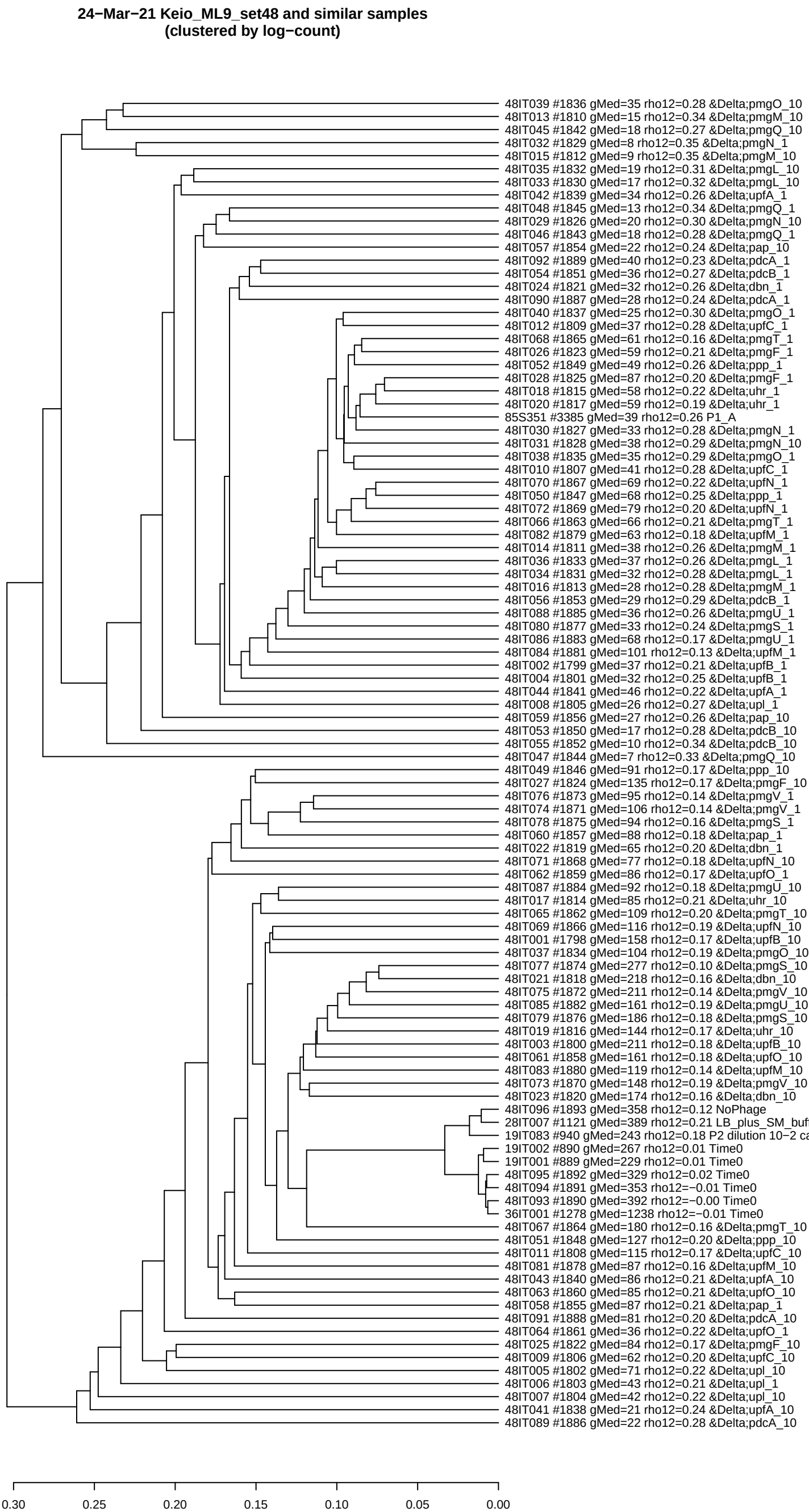


8−Feb−21 Keio_ML9_set46 and similar samples (clustered by log−count)

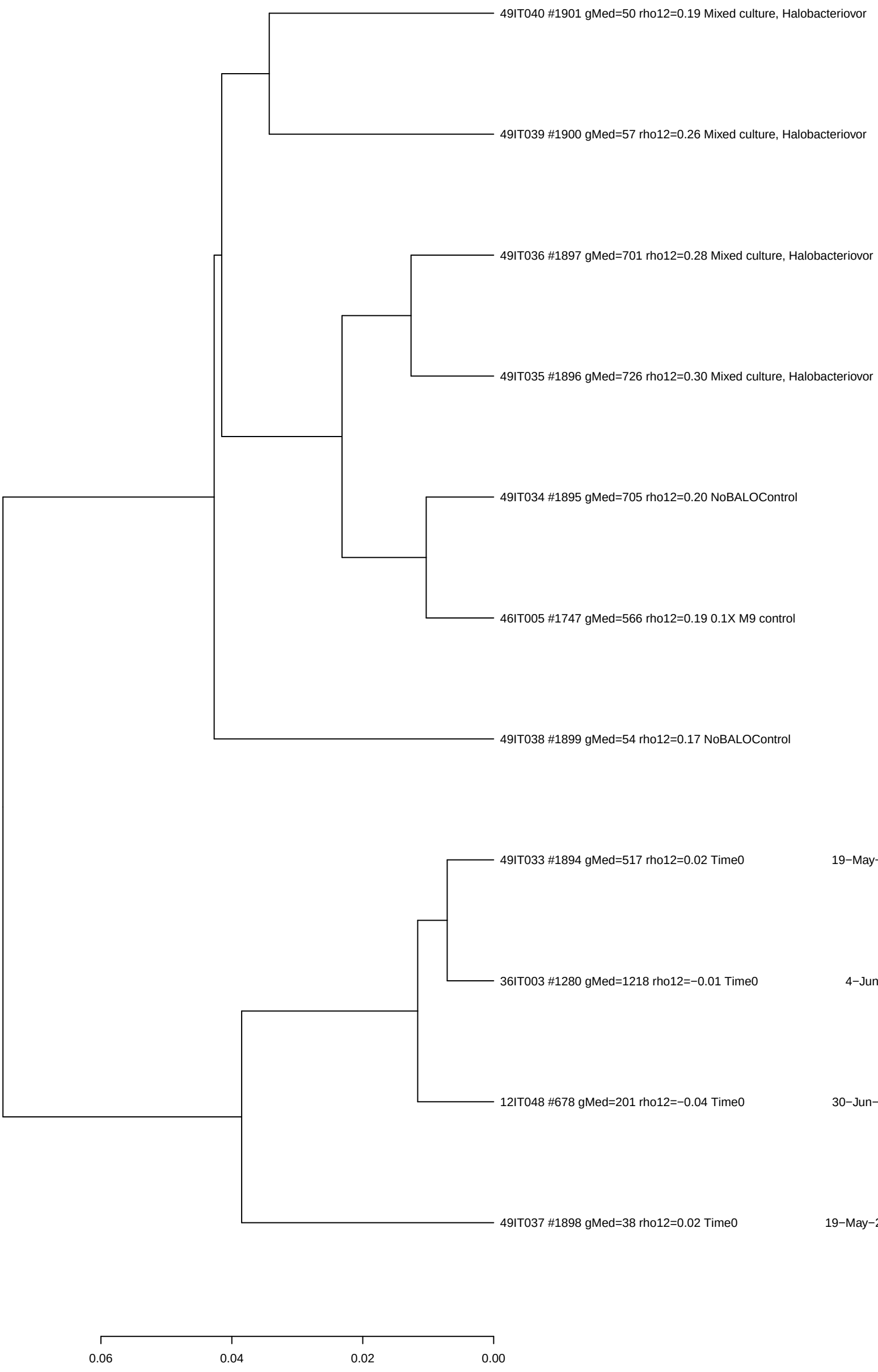


20−Jan−21 Keio_ML9_set47 and similar samples
(clustered by log−count)

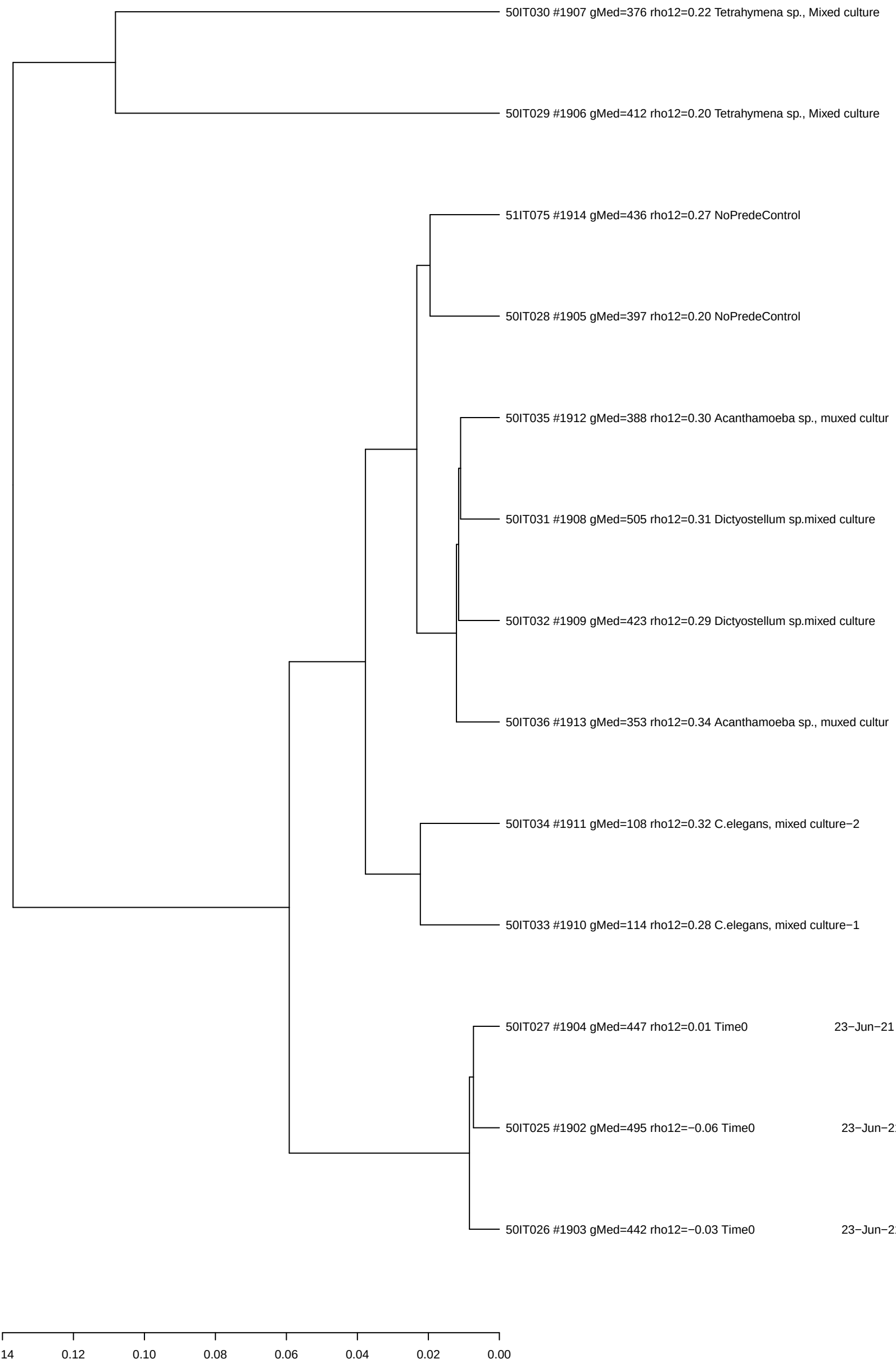



24−Mar−21 Keio_ML9_set48 and similar samples
(clustered by log−count)
48IT039 #1836 gMed=35 rho12=0.28 ΔpmgO_10
48IT013 #1810 gMed=15 rho12=0.34 ΔpmgM_10
48IT045 #1842 gMed=18 rho12=0.27 ΔpmgQ_10
48IT032 #1829 gMed=8 rho12=0.35 ΔpmgN_1
48IT015 #1812 gMed=9 rho12=0.35 ΔpmgM_10
48IT035 #1832 gMed=19 rho12=0.31 ΔpmgL_10
48IT033 #1830 gMed=17 rho12=0.32 ΔpmgL_10
48IT042 #1839 gMed=34 rho12=0.26 ΔupfA_1
48IT048 #1845 gMed=13 rho12=0.34 ΔpmgQ_1
48IT029 #1826 gMed=20 rho12=0.30 ΔpmgN_10
48IT046 #1843 gMed=18 rho12=0.28 ΔpmgQ_1
48IT057 #1854 gMed=22 rho12=0.24 Δpap_10
48IT092 #1889 gMed=40 rho12=0.23 ΔpdcA_1
48IT054 #1851 gMed=36 rho12=0.27 ΔpdcB_1
48IT024 #1821 gMed=32 rho12=0.26 Δdbn_1
48IT090 #1887 gMed=28 rho12=0.24 ΔpdcA_1
48IT040 #1837 gMed=25 rho12=0.30 ΔpmgO_1
48IT012 #1809 gMed=37 rho12=0.28 ΔupfC_1
48IT068 #1865 gMed=61 rho12=0.16 ΔpmgT_1
48IT026 #1823 gMed=59 rho12=0.21 ΔpmgF_1
48IT052 #1849 gMed=49 rho12=0.26 Δppp_1
48IT028 #1825 gMed=87 rho12=0.20 ΔpmgF_1
48IT018 #1815 gMed=58 rho12=0.22 Δuhr_1
48IT020 #1817 gMed=59 rho12=0.19 Δuhr_1
85S351 #3385 gMed=39 rho12=0.26 P1_A
48IT030 #1827 gMed=33 rho12=0.28 ΔpmgN_1
48IT031 #1828 gMed=38 rho12=0.29 ΔpmgN_10
48IT038 #1835 gMed=35 rho12=0.29 ΔpmgO_1
48IT010 #1807 gMed=41 rho12=0.28 ΔupfC_1
48IT070 #1867 gMed=69 rho12=0.22 ΔupfN_1
48IT050 #1847 gMed=68 rho12=0.25 Δppp_1
48IT072 #1869 gMed=79 rho12=0.20 ΔupfN_1
48IT066 #1863 gMed=66 rho12=0.21 ΔpmgT_1
48IT082 #1879 gMed=63 rho12=0.18 ΔupfM_1
48IT014 #1811 gMed=38 rho12=0.26 ΔpmgM_1
48IT036 #1833 gMed=37 rho12=0.26 ΔpmgL_1
48IT034 #1831 gMed=32 rho12=0.28 ΔpmgL_1
48IT016 #1813 gMed=28 rho12=0.28 ΔpmgM_1
48IT056 #1853 gMed=29 rho12=0.29 ΔpdcB_1
48IT088 #1885 gMed=36 rho12=0.26 ΔpmgU_1
48IT080 #1877 gMed=33 rho12=0.24 ΔpmgS_1
48IT086 #1883 gMed=68 rho12=0.17 ΔpmgU_1
48IT084 #1881 gMed=101 rho12=0.13 ΔupfM_1
48IT002 #1799 gMed=37 rho12=0.21 ΔupfB_1
48IT004 #1801 gMed=32 rho12=0.25 ΔupfB_1
48IT044 #1841 gMed=46 rho12=0.22 ΔupfA_1
48IT008 #1805 gMed=26 rho12=0.27 Δupl_1
48IT059 #1856 gMed=27 rho12=0.26 Δpap_10
48IT053 #1850 gMed=17 rho12=0.28 ΔpdcB_10
48IT055 #1852 gMed=10 rho12=0.34 ΔpdcB_10
48IT047 #1844 gMed=7 rho12=0.33 ΔpmgQ_10
48IT049 #1846 gMed=91 rho12=0.17 Δppp_10
48IT027 #1824 gMed=135 rho12=0.17 ΔpmgF_10
48IT076 #1873 gMed=95 rho12=0.14 ΔpmgV_1
48IT074 #1871 gMed=106 rho12=0.14 ΔpmgV_1
48IT078 #1875 gMed=94 rho12=0.16 ΔpmgS_1
48IT060 #1857 gMed=88 rho12=0.18 Δpap_1
48IT022 #1819 gMed=65 rho12=0.20 Δdbn_1
48IT071 #1868 gMed=77 rho12=0.18 ΔupfN_10
48IT062 #1859 gMed=86 rho12=0.17 ΔupfO_1
48IT087 #1884 gMed=92 rho12=0.18 ΔpmgU_10
48IT017 #1814 gMed=85 rho12=0.21 Δuhr_10
48IT065 #1862 gMed=109 rho12=0.20 ΔpmgT_10
48IT069 #1866 gMed=116 rho12=0.19 ΔupfN_10
48IT001 #1798 gMed=158 rho12=0.17 ΔupfB_10
48IT037 #1834 gMed=104 rho12=0.19 ΔpmgO_10
48IT077 #1874 gMed=277 rho12=0.10 ΔpmgS_10
48IT021 #1818 gMed=218 rho12=0.16 Δdbn_10
48IT075 #1872 gMed=211 rho12=0.14 ΔpmgV_10
48IT085 #1882 gMed=161 rho12=0.19 ΔpmgU_10
48IT079 #1876 gMed=186 rho12=0.18 ΔpmgS_10
48IT019 #1816 gMed=144 rho12=0.17 Δuhr_10
48IT003 #1800 gMed=211 rho12=0.18 ΔupfB_10
48IT061 #1858 gMed=161 rho12=0.18 ΔupfO_10
48IT083 #1880 gMed=119 rho12=0.14 ΔupfM_10
48IT073 #1870 gMed=148 rho12=0.19 ΔpmgV_10
48IT023 #1820 gMed=174 rho12=0.16 Δdbn_10
48IT096 #1893 gMed=358 rho12=0.12 NoPhage
28IT007 #1121 gMed=389 rho12=0.21 LB_plus_SM_buffer
19IT083 #940 gMed=243 rho12=0.18 P2 dilution 10−2 cacl2
19IT002 #890 gMed=267 rho12=0.01 Time0
19IT001 #889 gMed=229 rho12=0.01 Time0
48IT095 #1892 gMed=329 rho12=0.02 Time0
48IT094 #1891 gMed=353 rho12=−0.01 Time0
48IT093 #1890 gMed=392 rho12=−0.00 Time0
36IT001 #1278 gMed=1238 rho12=−0.01 Time0
48IT067 #1864 gMed=180 rho12=0.16 ΔpmgT_10
48IT051 #1848 gMed=127 rho12=0.20 Δppp_10
48IT011 #1808 gMed=115 rho12=0.17 ΔupfC_10
48IT081 #1878 gMed=87 rho12=0.16 ΔupfM_10
48IT043 #1840 gMed=86 rho12=0.21 ΔupfA_10
48IT063 #1860 gMed=85 rho12=0.21 ΔupfO_10
48IT058 #1855 gMed=87 rho12=0.21 Δpap_1
48IT091 #1888 gMed=81 rho12=0.20 ΔpdcA_10
48IT064 #1861 gMed=36 rho12=0.22 ΔupfO_1
48IT025 #1822 gMed=84 rho12=0.17 ΔpmgF_10
48IT009 #1806 gMed=62 rho12=0.20 ΔupfC_10
48IT005 #1802 gMed=71 rho12=0.22 Δupl_10
48IT006 #1803 gMed=43 rho12=0.21 Δupl_1
48IT007 #1804 gMed=42 rho12=0.22 Δupl_10
48IT041 #1838 gMed=21 rho12=0.24 ΔupfA_10
48IT089 #1886 gMed=22 rho12=0.28 ΔpdcA_10
22−Mar−17 Keio_ML9_
22−Mar−17 Keio_ML9_
24−Mar−21 Keio_ML9
24−Mar−21 Keio_ML
24−Mar−21 Keio_ML
4−Jun−19 Keio_ML
0.30
0.25
0.20
0.15
0.10
0.05
0.00

19−May−21 Keio_ML9_set49 and similar samples (clustered by log−count)



23−Jun−21 Keio_ML9_set50 and similar samples (clustered by log−count)



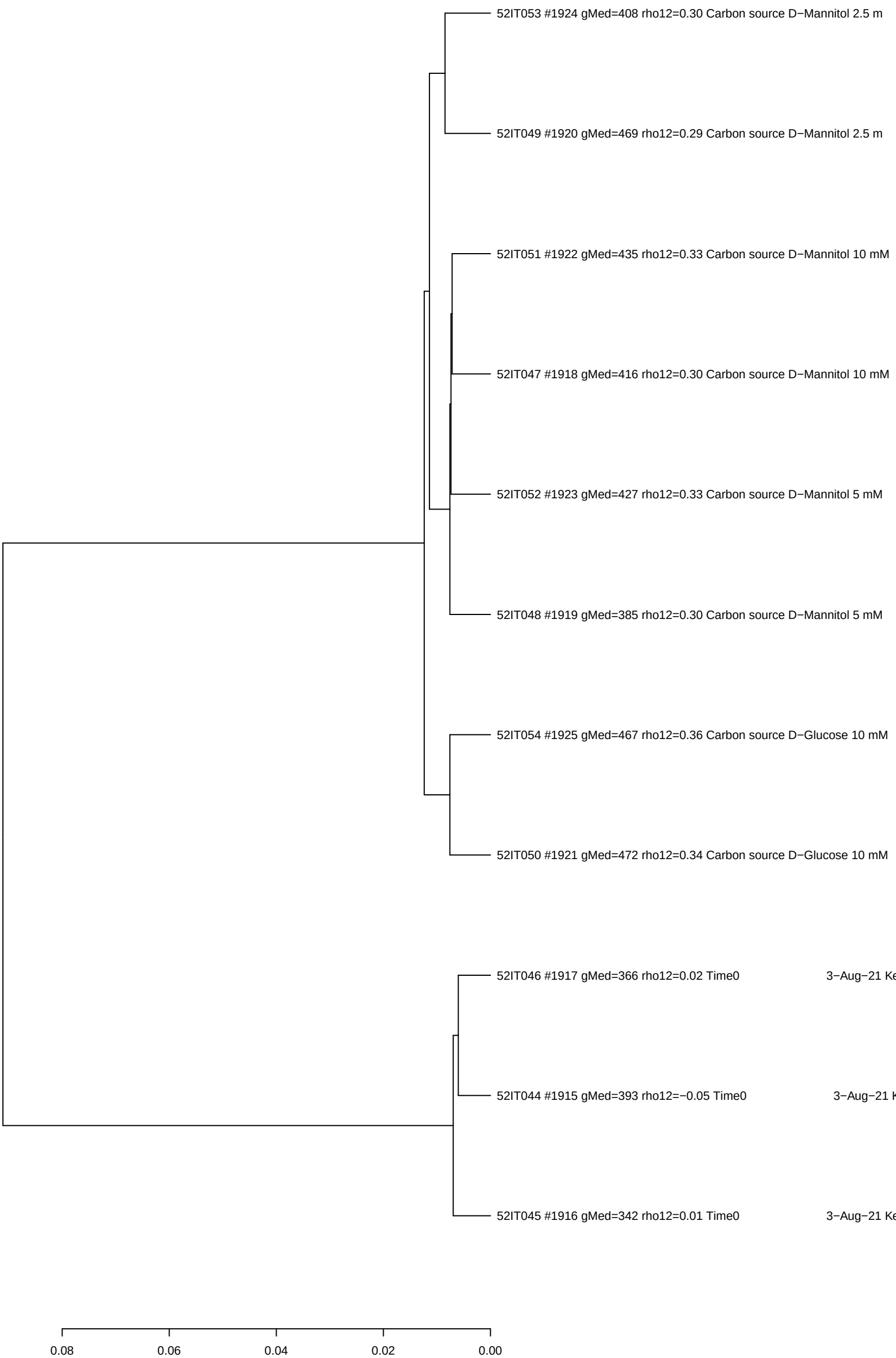
23−Jun−21 and similar samples
(clustered by log−count)

51IT075 #1914 gMed=436 rho12=0.27 NoPredeControl

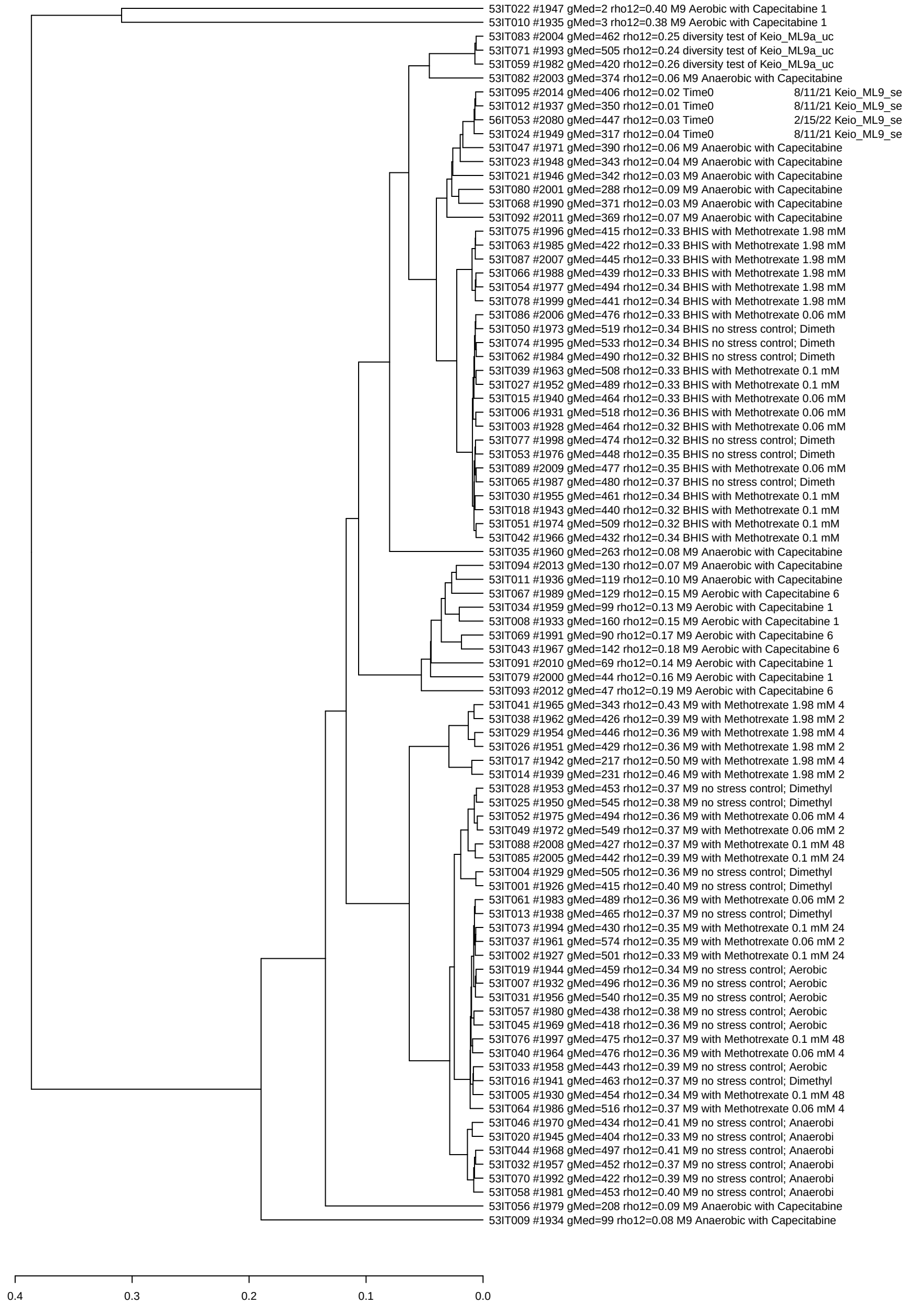
50IT032 #1909 gMed=423 rho12=0.29 Dictyostellum sp.mixed culture

0.015 0.010 0.005 0.000

3−Aug−21 Keio_ML9_set52 and similar samples (clustered by log−count)



8/11/21 Keio_ML9_set53 and similar samples (clustered by log−count)



3/30/22 Keio_ML9_set54 and similar samples (clustered by log−count)

54IT092 #2032 gMed=387 rho12=0.04 Time0 3/31/22 Keio_ML9_se

54IT083 #2023 gMed=345 rho12=0.01 Time0 3/30/22 Keio_ML9_se

54IT091 #2031 gMed=508 rho12=0.02 Time0 3/31/22 Keio_ML9_se

54IT082 #2022 gMed=416 rho12=0.09 Time0 3/30/22 Keio_ML9_se

54IT081 #2021 gMed=405 rho12=0.01 Time0 3/30/22 Keio_ML9_se

54IT079 #2019 gMed=348 rho12=0.41 mariner vector transformation;

54IT078 #2018 gMed=380 rho12=0.41 mariner vector transformation;

54IT080 #2020 gMed=303 rho12=0.39 mariner vector transformation;

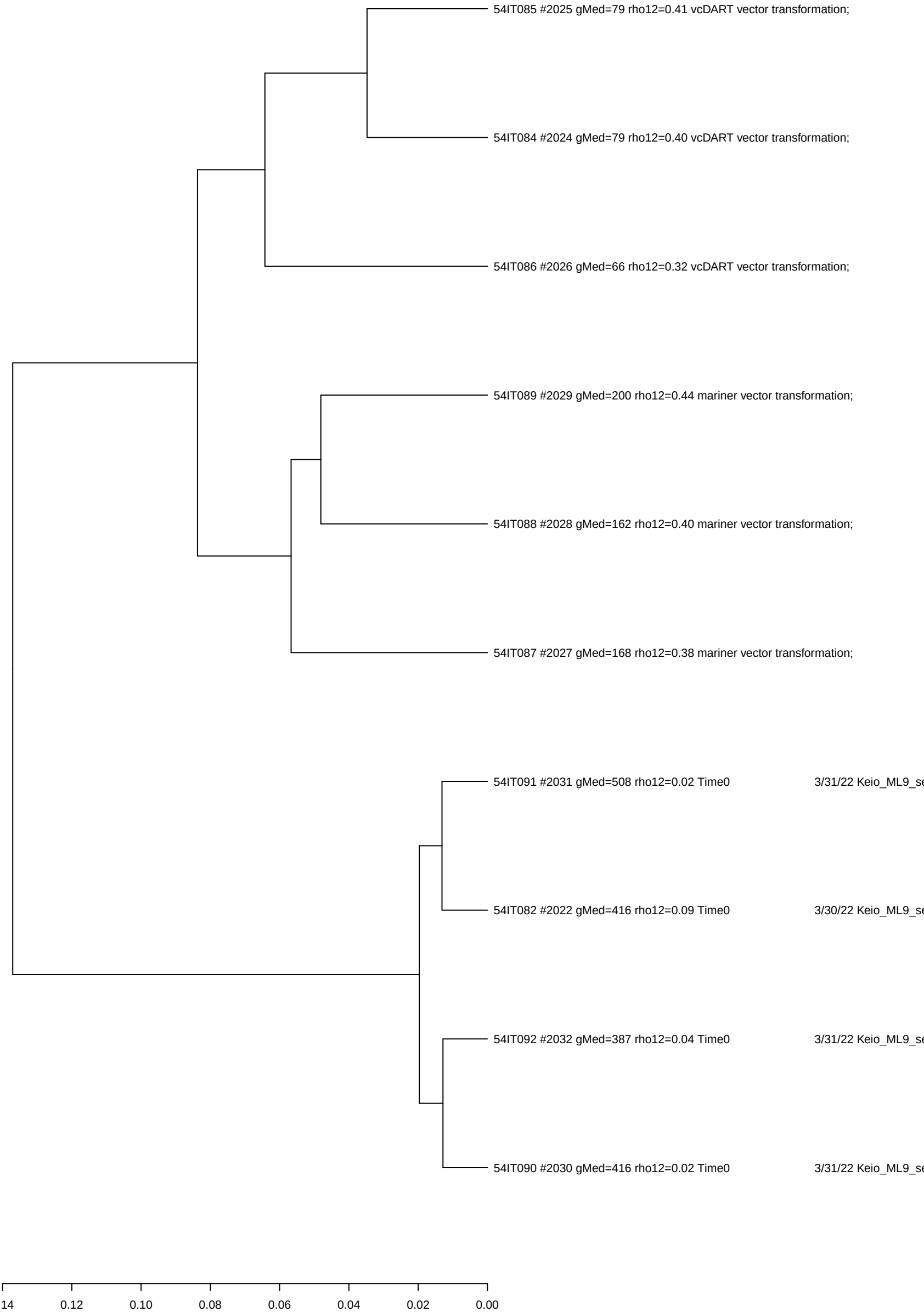
54IT077 #2017 gMed=312 rho12=0.41 vcDART vector transformation;

54IT076 #2016 gMed=291 rho12=0.45 vcDART vector transformation;

54IT075 #2015 gMed=276 rho12=0.42 vcDART vector transformation;

0.06 0.05 0.04 0.03 0.02 0.01 0.00

3/31/22 Keio_ML9_set54 and similar samples (clustered by log−count)



7/6/22 Keio_ML9_set55 and similar samples (clustered by log−count)

55IT041 #2037 gMed=0 rho12=0.47 MS2_10_B1

55IT038 #2034 gMed=0 rho12=0.47 MS2_10_A1

55IT047 #2043 gMed=4 rho12=0.44 QB_10_D1

55IT044 #2040 gMed=5 rho12=0.47 QB_10_C1

55IT042 #2038 gMed=97 rho12=0.42 MS2_100_B2

55IT039 #2035 gMed=78 rho12=0.44 MS2_100_A2

16IT075 #828 gMed=34 rho12=0.27 LB_plus_SM_buffer with CI1857_

55IT050 #2046 gMed=34 rho12=0.38 Fr_10_E1

55IT049 #2045 gMed=131 rho12=0.21 QB_1000_D3

55IT046 #2042 gMed=120 rho12=0.24 QB_100_C3

Time0 55IT037

36IT001 #1278 gMed=1238 rho12=−0.01 Time0 4−Jun−19 Keio_ML

10IT073 #626 gMed=108 rho12=0.04 Time0 7/20/2015 Keio_ML9_s

55IT043 #2039 gMed=278 rho12=0.23 MS2_1000_B3

55IT040 #2036 gMed=268 rho12=0.18 MS2_1000_A3

55IT054 #2050 gMed=340 rho12=0.20 Fr_100_F2

55IT052 #2048 gMed=381 rho12=0.18 Fr_1000_E3

55IT055 #2051 gMed=381 rho12=0.20 Fr_1000_F3

55IT051 #2047 gMed=413 rho12=0.14 Fr_100_E2

32IT008 #1174 gMed=442 rho12=0.13 NoPhageControl

55IT053 #2049 gMed=37 rho12=0.34 Fr_10_F1

55IT048 #2044 gMed=47 rho12=0.29 QB_100_D2

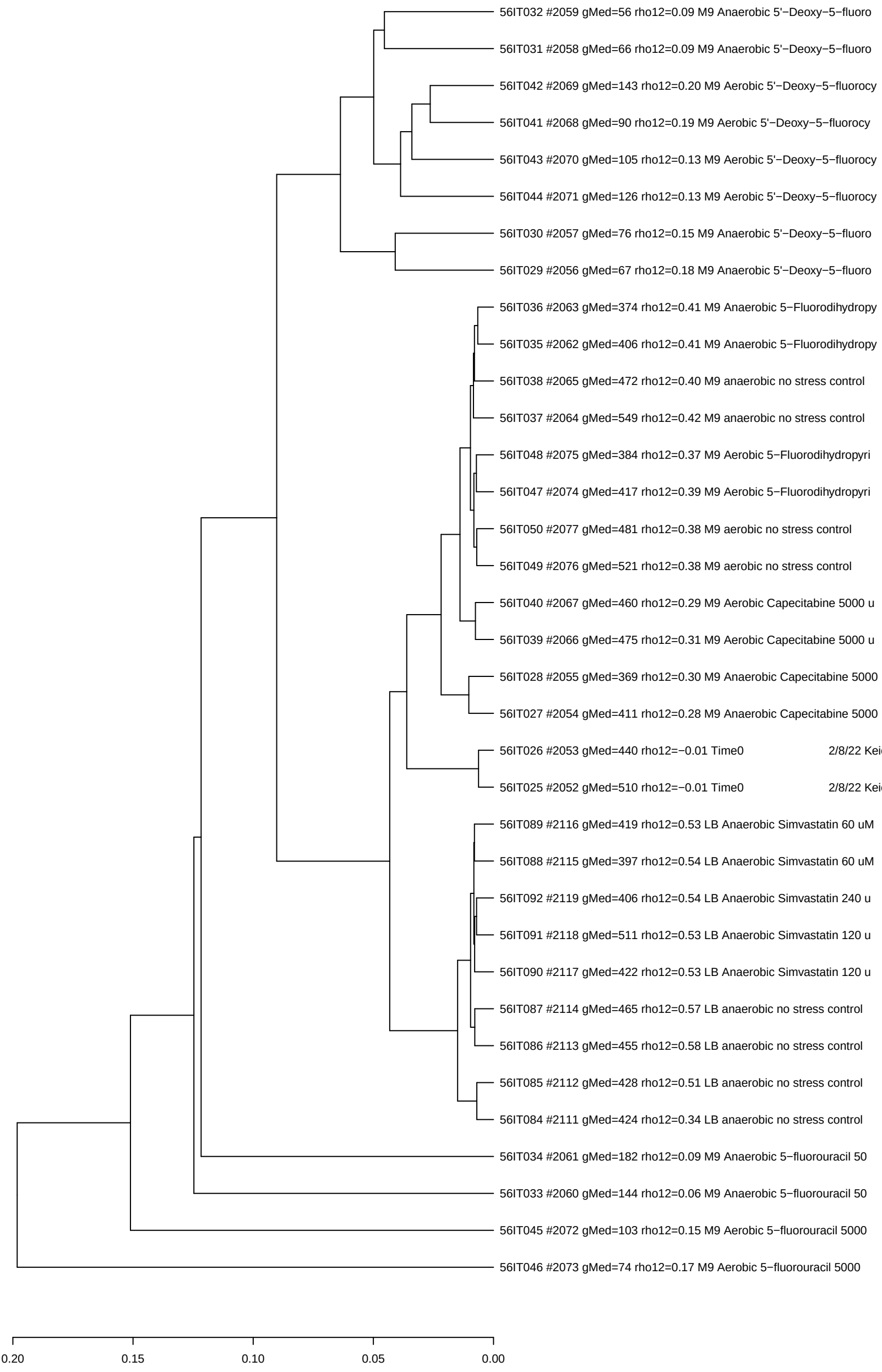
55IT045 #2041 gMed=34 rho12=0.36 QB_100_C2

64S54 #2407 gMed=5 rho12=0.43 N4

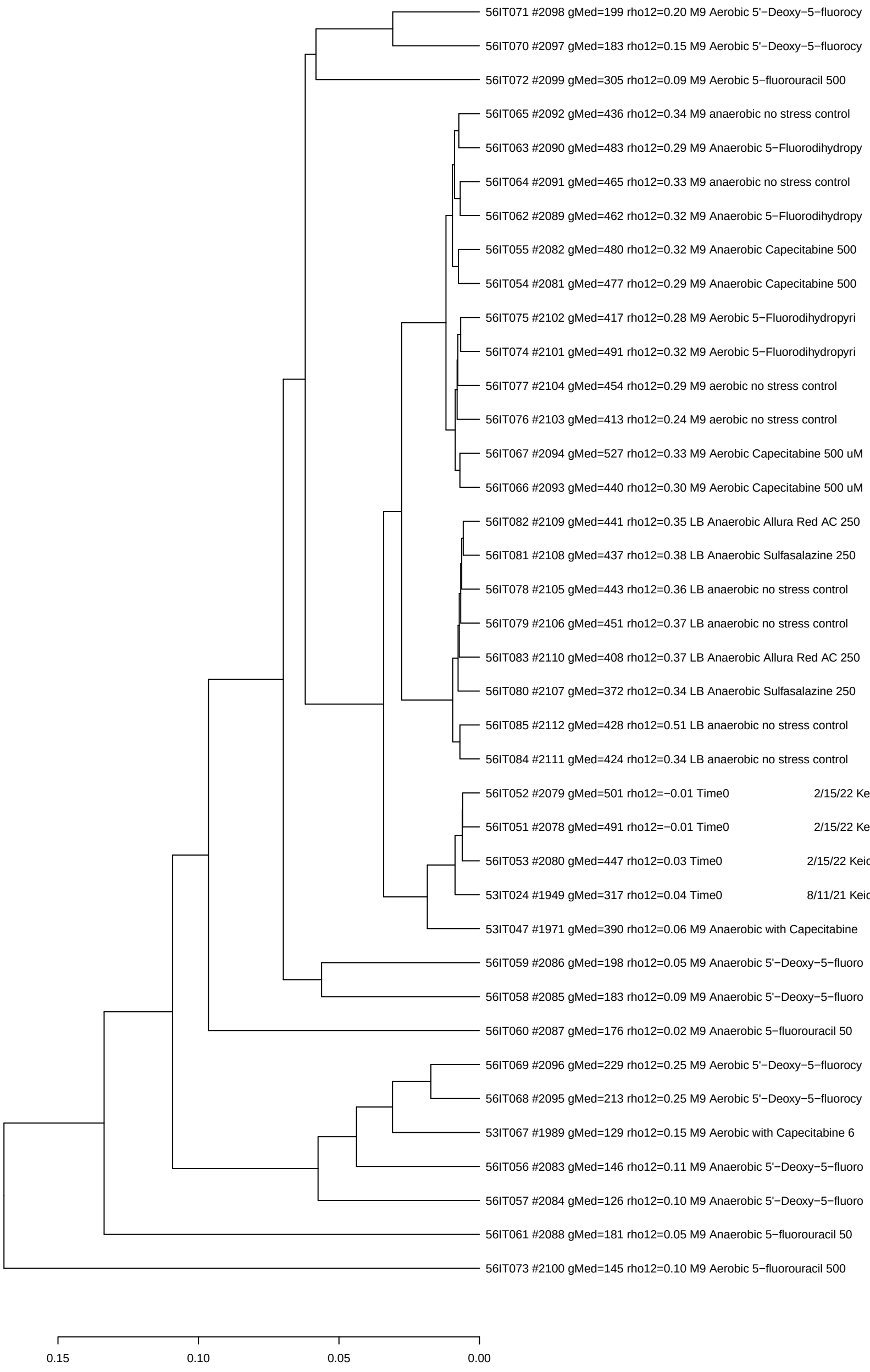
16IT086 #839 gMed=5 rho12=0.43 LB_plus_SM_buffer with N4_phag

0.6 0.5 0.4 0.3 0.2 0.1 0.0

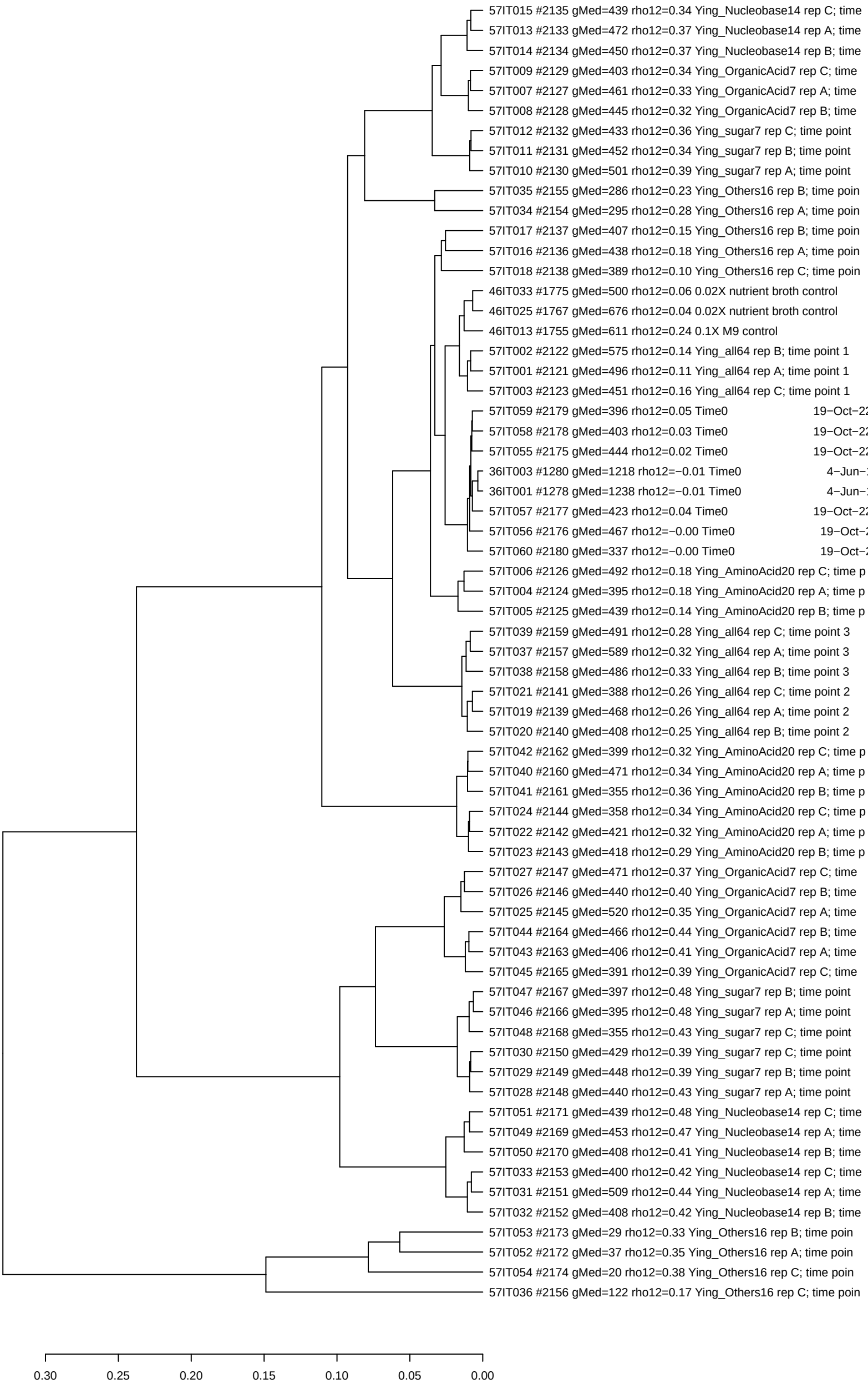
2/8/22 Keio_ML9_set56 and similar samples (clustered by log−count)



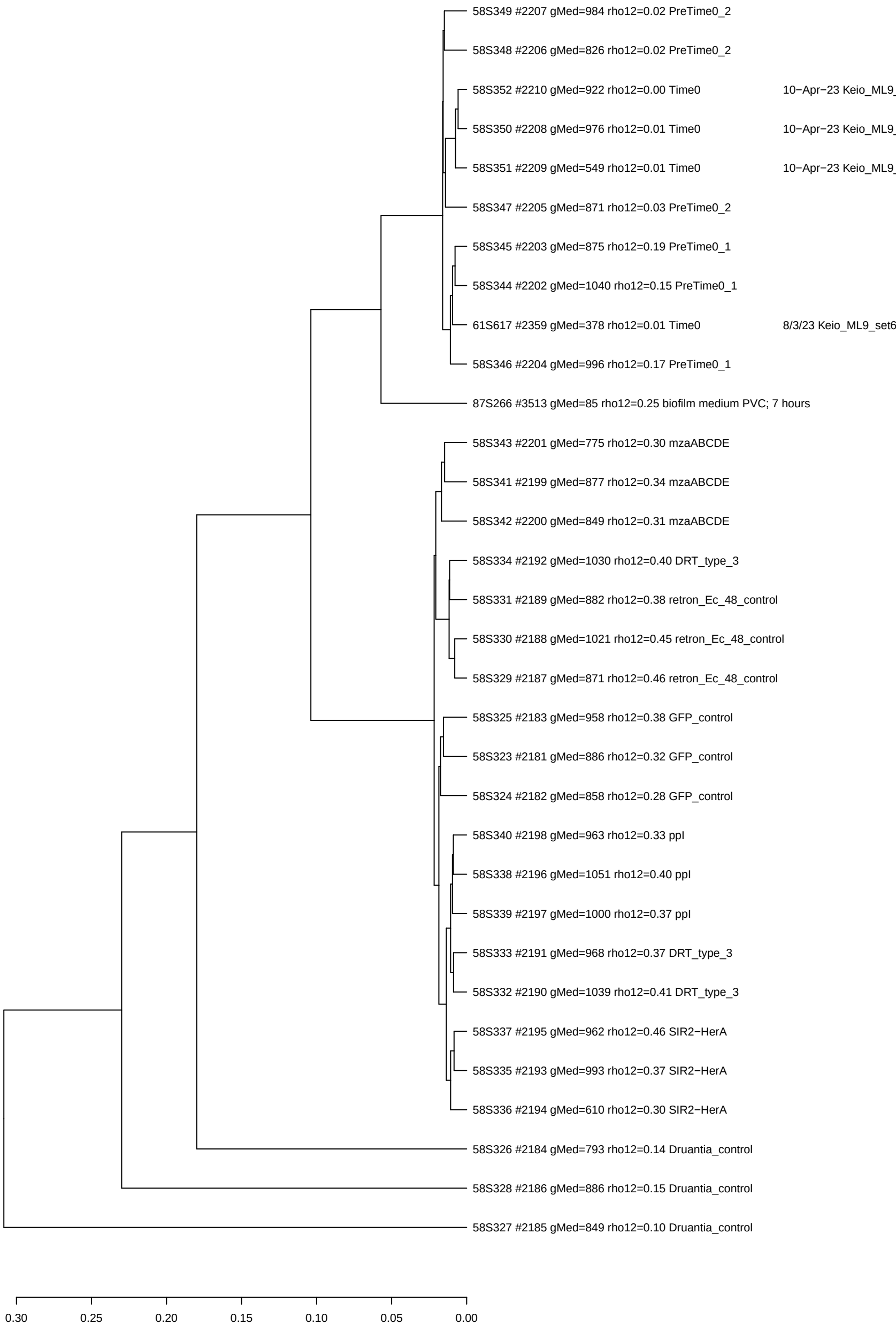
2/15/22 Keio_ML9_set56 and similar samples (clustered by log−count)



19−Oct−22 Keio_ML9_set57 and similar samples (clustered by log−count)



10−Apr−23 Keio_ML9_set58 and similar samples (clustered by log−count)



Keio_ML9_set59 and similar samples (clustered by log−count)

62S493 #2370 gMed=441 rho12=0.08 Time0 9/22/23 Keio_ML9_set

46IT029 #1771 gMed=596 rho12=0.08 0.02X nutrient broth control

50IT025 #1902 gMed=495 rho12=−0.06 Time0 23−Jun−21 Keio_ML

59S78 #2213 gMed=588 rho12=0.04 Time0 Keio_ML9_set59

59S76 #2211 gMed=535 rho12=−0.01 Time0 Keio_ML9_set59

59S79 #2214 gMed=478 rho12=0.01 Time0 Keio_ML9_set59

59S77 #2212 gMed=548 rho12=0.01 Time0 Keio_ML9_set59

59S81 #2216 gMed=609 rho12=0.37 Outgrowth from conjugation wit

59S80 #2215 gMed=458 rho12=0.36 Outgrowth from conjugation wit

59S85 #2220 gMed=519 rho12=0.39 Outgrowth from conjugation wit

59S84 #2219 gMed=446 rho12=0.37 Outgrowth from conjugation wit

59S83 #2218 gMed=541 rho12=0.33 Outgrowth from conjugation wit

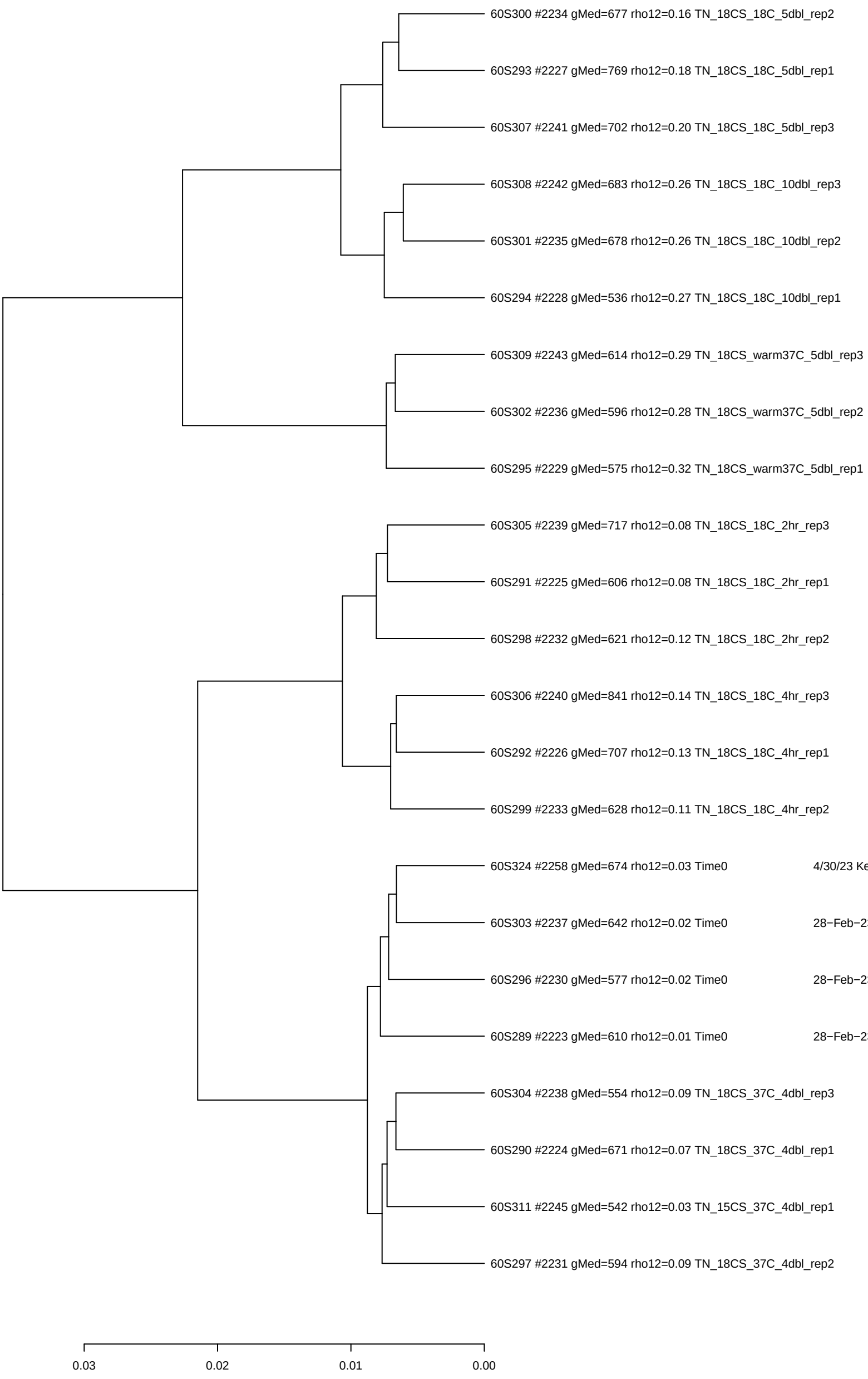
59S82 #2217 gMed=536 rho12=0.36 Outgrowth from conjugation wit

59S87 #2222 gMed=595 rho12=0.37 Outgrowth from conjugation wit

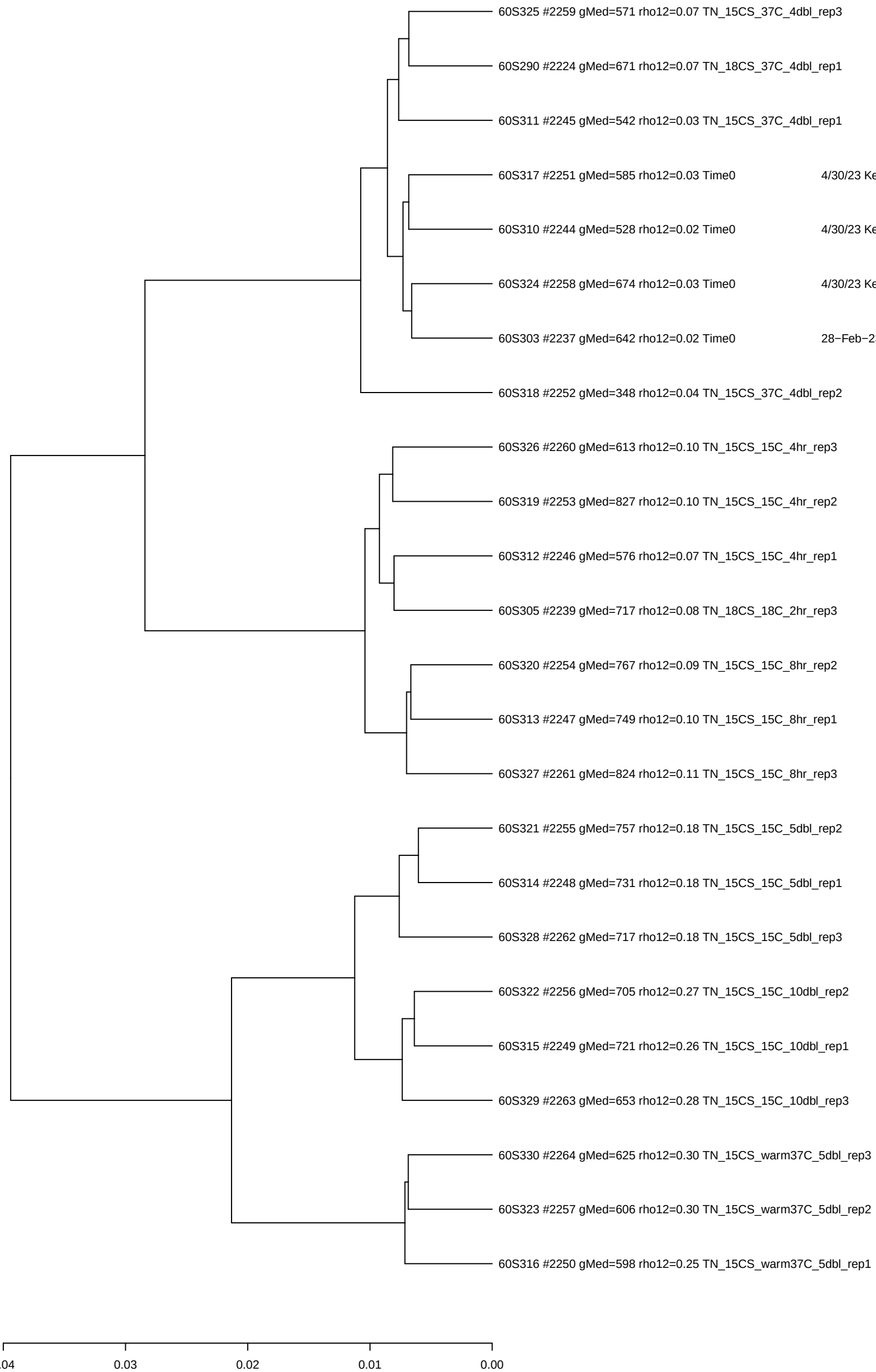
59S86 #2221 gMed=466 rho12=0.34 Outgrowth from conjugation wit

0.04 0.03 0.02 0.01 0.00

28−Feb−23 Keio_ML9_set60 and similar samples (clustered by log−count)



4/30/23 Keio_ML9_set60 and similar samples (clustered by log−count)



8/3/23 Keio_ML9_set61 and similar samples (clustered by log−count)

69S539 #2840 gMed=0 rho12=0.45 MPec26
61S66 #2328 gMed=0 rho12=0.47 Bas33
61S65 #2327 gMed=0 rho12=0.48 Bas33
61S27 #2291 gMed=0 rho12=0.48 Bas14
61S75 #2337 gMed=0 rho12=0.49 Bas20
61S33 #2297 gMed=0 rho12=0.50 Bas54
65S162 #2653 gMed=0 rho12=0.49 Ste67
61S76 #2338 gMed=0 rho12=0.48 Bas20
61S28 #2292 gMed=0 rho12=0.49 Bas14
61S62 #2324 gMed=0 rho12=0.49 Bas08
61S61 #2323 gMed=0 rho12=0.49 Bas08
61S86 #2348 gMed=0 rho12=0.49 Bas10
61S85 #2347 gMed=0 rho12=0.49 Bas10
61S77 #2339 gMed=0 rho12=0.49 Bas34
61S18 #2282 gMed=0 rho12=0.50 Bas27
61S30 #2294 gMed=0 rho12=0.50 Bas28
66S446 #2730 gMed=0 rho12=0.49 Bas33
66S415 #2699 gMed=0 rho12=0.49 EV212
61S41 #2303 gMed=0 rho12=0.50 Bas29
66S445 #2729 gMed=0 rho12=0.49 Bas33
61S54 #2316 gMed=0 rho12=0.50 Bas31
61S17 #2281 gMed=0 rho12=0.49 Bas27
61S78 #2340 gMed=0 rho12=0.50 Bas34
61S42 #2304 gMed=0 rho12=0.49 Bas29
61S53 #2315 gMed=0 rho12=0.50 Bas31
61S29 #2293 gMed=0 rho12=0.50 Bas28
61S38 #2300 gMed=0 rho12=0.50 Bas06
61S37 #2299 gMed=0 rho12=0.49 Bas06
65S38 #2557 gMed=0 rho12=0.46 Ste04
61S13 #2277 gMed=0 rho12=0.50 Bas04
61S14 #2278 gMed=0 rho12=0.50 Bas04
65S85 #2603 gMed=0 rho12=0.47 Ste10
61S63 #2325 gMed=0 rho12=0.50 Bas17
64S279 #2516 gMed=0 rho12=0.49 F
61S51 #2313 gMed=0 rho12=0.49 Bas16
61S40 #2302 gMed=0 rho12=0.50 Bas15
61S2 #2266 gMed=0 rho12=0.50 Bas03
61S64 #2326 gMed=0 rho12=0.50 Bas17
61S52 #2314 gMed=0 rho12=0.50 Bas16
61S39 #2301 gMed=0 rho12=0.50 Bas15
61S1 #2265 gMed=0 rho12=0.49 Bas03
61S74 #2336 gMed=0 rho12=0.50 Bas09
61S73 #2335 gMed=0 rho12=0.50 Bas09
65S131 #2632 gMed=0 rho12=0.47 Bas07
61S50 #2312 gMed=0 rho12=0.50 Bas07
61S49 #2311 gMed=0 rho12=0.49 Bas07
61S26 #2290 gMed=0 rho12=0.50 Bas05
61S25 #2289 gMed=0 rho12=0.50 Bas05
61S16 #2280 gMed=0 rho12=0.48 Bas13
61S15 #2279 gMed=0 rho12=0.48 Bas13
61S90 #2352 gMed=289 rho12=0.15 Control_Tn1
61S89 #2351 gMed=301 rho12=0.09 Control_Tn1
61S619 #2361 gMed=329 rho12=−0.01 Time0 8/3/23 Keio_ML9_set
61S617 #2359 gMed=378 rho12=0.01 Time0 8/3/23 Keio_ML9_set6
61S618 #2360 gMed=343 rho12=0.02 Time0 8/3/23 Keio_ML9_set6
61S11 #2275 gMed=6 rho12=0.43 Bas63
84S196 #3261 gMed=3 rho12=0.47 Borec
64S158 #2453 gMed=3 rho12=0.34 Bas24
64S146 #2447 gMed=2 rho12=0.44 Bas23
61S4 #2268 gMed=2 rho12=0.48 Bas12
61S3 #2267 gMed=2 rho12=0.48 Bas12
61S88 #2350 gMed=0 rho12=0.49 Bas21
61S87 #2349 gMed=0 rho12=0.48 Bas21
61S6 #2270 gMed=0 rho12=0.48 Bas22
61S5 #2269 gMed=0 rho12=0.49 Bas22

1.0 0.8 0.6 0.4 0.2 0.0

8/7/23 Keio_ML9_set61 and similar samples (clustered by log−count)

61S47 #2309 gMed=0 rho12=0.49 Bas69
16IT084 #837 gMed=0 rho12=0.47 LB_plus_SM_buffer with N4_phag
61S48 #2310 gMed=0 rho12=0.48 Bas69
61S90 #2352 gMed=289 rho12=0.15 Control_Tn1
61S89 #2351 gMed=301 rho12=0.09 Control_Tn1
61S95 #2357 gMed=293 rho12=0.13 Control_Tn2
61S96 #2358 gMed=292 rho12=0.16 Control_Tn2
61S622 #2364 gMed=314 rho12=0.01 Time0 8/7/23 Keio_ML9_set6
61S621 #2363 gMed=351 rho12=0.02 Time0 8/7/23 Keio_ML9_set6
61S620 #2362 gMed=281 rho12=−0.01 Time0 8/7/23 Keio_ML9_set
61S617 #2359 gMed=378 rho12=0.01 Time0 8/3/23 Keio_ML9_set6
19IT034 #922 gMed=202 rho12=0.13 NoPhageControl_ML9a
61S72 #2334 gMed=275 rho12=0.28 Laval1374
61S71 #2333 gMed=302 rho12=0.25 Laval1374
61S83 #2345 gMed=26 rho12=0.34 CM8
74S115 #2942 gMed=47 rho12=0.22 Mnm9
61S11 #2275 gMed=6 rho12=0.43 Bas63
66S461 #2745 gMed=0 rho12=0.49 K30
61S60 #2322 gMed=0 rho12=0.50 Laval1263
69S504 #2823 gMed=0 rho12=0.44 MPec11
61S55 #2317 gMed=0 rho12=0.50 Bas41
61S59 #2321 gMed=0 rho12=0.50 Laval1263
61S56 #2318 gMed=0 rho12=0.49 Bas41
66S403 #2687 gMed=0 rho12=0.48 EV156
65S162 #2653 gMed=0 rho12=0.49 Ste67
65S212 #2668 gMed=0 rho12=0.46 Bas54
61S34 #2298 gMed=0 rho12=0.50 Bas54
64S171 #2460 gMed=0 rho12=0.50 Bas53
61S33 #2297 gMed=0 rho12=0.50 Bas54
64S172 #2461 gMed=0 rho12=0.50 Bas53
61S69 #2331 gMed=0 rho12=0.50 Bas58
61S58 #2320 gMed=0 rho12=0.50 Bas57
61S57 #2319 gMed=0 rho12=0.50 Bas57
61S24 #2288 gMed=0 rho12=0.48 Bas64
61S23 #2287 gMed=0 rho12=0.49 Bas64
61S84 #2346 gMed=0 rho12=0.50 CM8
61S8 #2272 gMed=0 rho12=0.50 Bas35
61S32 #2296 gMed=0 rho12=0.50 Bas37
61S7 #2271 gMed=0 rho12=0.49 Bas35
61S31 #2295 gMed=0 rho12=0.50 Bas37
61S20 #2284 gMed=0 rho12=0.49 Bas36
61S19 #2283 gMed=0 rho12=0.49 Bas36
65S12 #2531 gMed=1 rho12=0.46 Ste48
64S4 #2381 gMed=2 rho12=0.45 JK23
61S44 #2306 gMed=0 rho12=0.49 Bas39
61S43 #2305 gMed=0 rho12=0.47 Bas39
69S537 #2838 gMed=0 rho12=0.47 RB51
61S68 #2330 gMed=0 rho12=0.50 Bas47
61S67 #2329 gMed=0 rho12=0.49 Bas47
61S12 #2276 gMed=0 rho12=0.48 Bas63
66S436 #2720 gMed=0 rho12=0.48 Bas51
61S9 #2273 gMed=0 rho12=0.50 Bas51
61S10 #2274 gMed=0 rho12=0.50 Bas51
69S523 #2830 gMed=0 rho12=0.47 Bas60
61S93 #2355 gMed=0 rho12=0.49 Bas61
66S458 #2742 gMed=0 rho12=0.48 Bas38
61S94 #2356 gMed=0 rho12=0.50 Bas61
61S70 #2332 gMed=0 rho12=0.49 Bas58
61S21 #2285 gMed=0 rho12=0.50 Bas52
64S26 #2391 gMed=0 rho12=0.48 Laval1259
61S79 #2341 gMed=0 rho12=0.50 Bas48
61S80 #2342 gMed=0 rho12=0.49 Bas48
61S92 #2354 gMed=0 rho12=0.49 Bas49
61S91 #2353 gMed=0 rho12=0.49 Bas49
61S82 #2344 gMed=0 rho12=0.50 Bas59
61S81 #2343 gMed=0 rho12=0.50 Bas59
61S46 #2308 gMed=0 rho12=0.50 Bas56
61S45 #2307 gMed=0 rho12=0.50 Bas56
61S22 #2286 gMed=0 rho12=0.50 Bas52

1.0 0.8 0.6 0.4 0.2 0.0

10/3/23 Keio_ML9_set62 and similar samples (clustered by log−count)

62S488 #2367 gMed=379 rho12=−0.02 Time0

62S486 #2365 gMed=452 rho12=−0.00 Time0

62S487 #2366 gMed=397 rho12=0.00 Time0

0.007 0.006 0.005 0.004 0.003 0.002 0.001 0.000

9/22/23 Keio_ML9_set62 and similar samples (clustered by log−count)

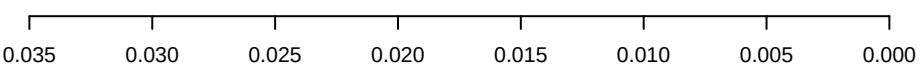
62S495 #2372 gMed=484 rho12=0.26 LB+Gent outgrowth of mutant li

62S494 #2371 gMed=437 rho12=0.31 LB+Gent outgrowth of mutant li

62S493 #2370 gMed=441 rho12=0.08 Time0 9/22/23 Keio_ML9_set

62S491 #2369 gMed=438 rho12=0.00 Time0 9/22/23 Keio_ML9_set

62S490 #2368 gMed=465 rho12=0.11 Time0 9/22/23 Keio_ML9_set



1/3/24 Keio_ML9_set63 and similar samples (clustered by log−count)

63S550 #2374 gMed=1002 rho12=−0.00 Time0 1/3/24 Keio_ML9_se

63S549 #2373 gMed=981 rho12=0.04 Time0 1/3/24 Keio_ML9_set6

63S551 #2375 gMed=923 rho12=0.10 Time0 1/3/24 Keio_ML9_set6

63S552 #2376 gMed=797 rho12=0.05 Time0 1/3/24 Keio_ML9_set6

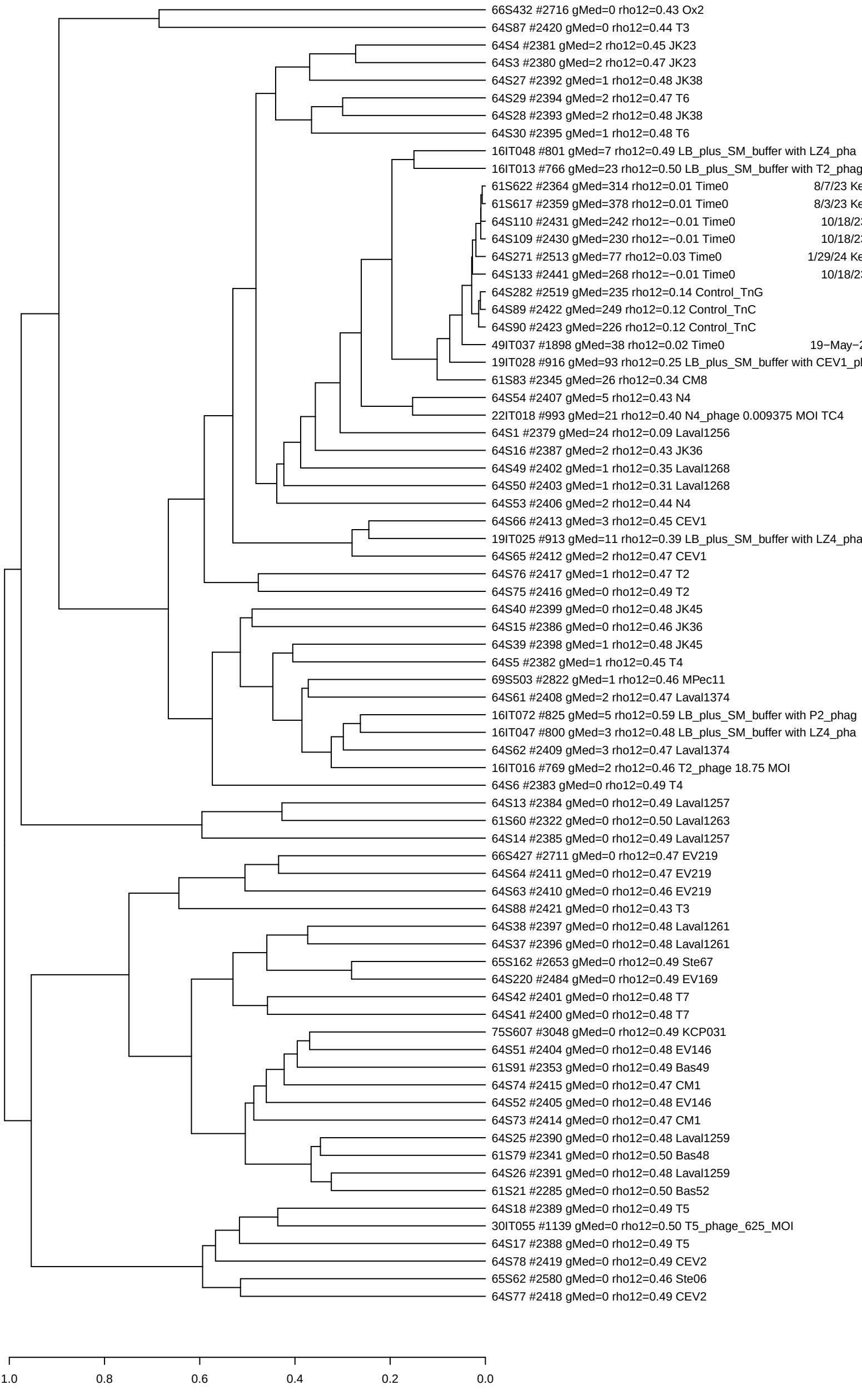
56IT026 #2053 gMed=440 rho12=−0.01 Time0 2/8/22 Keio_ML9_se

63S570 #2378 gMed=362 rho12=0.18 LB+Gent outgrowth after 7 day

63S569 #2377 gMed=281 rho12=0.17 LB+Gent outgrowth after 7 day

0.15 0.10 0.05 0.00

10/18/23 Keio_ML9_set64 and similar samples (clustered by log−count)

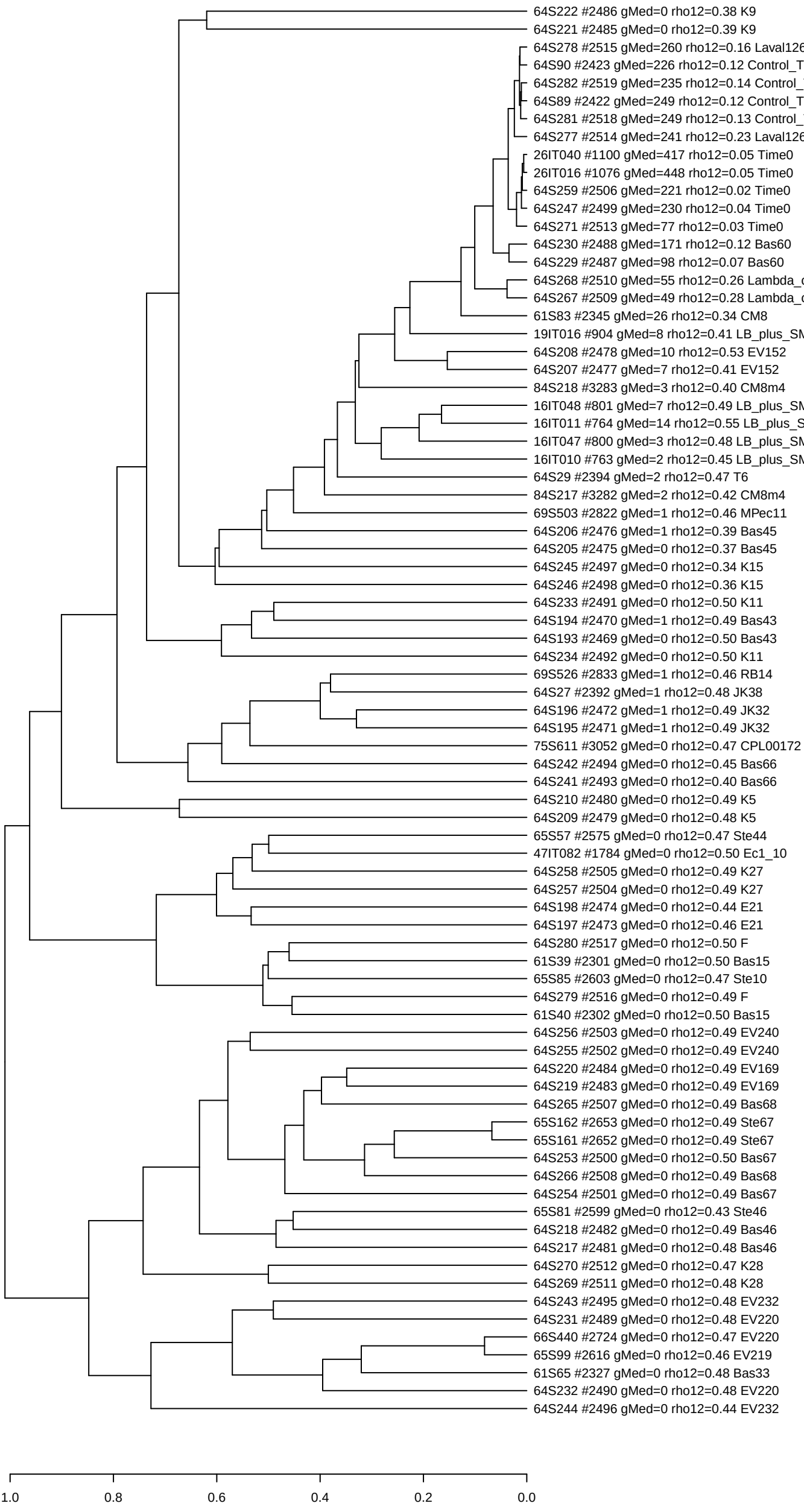


1/19/24 Keio_ML9_set64 and similar samples (clustered by log−count)

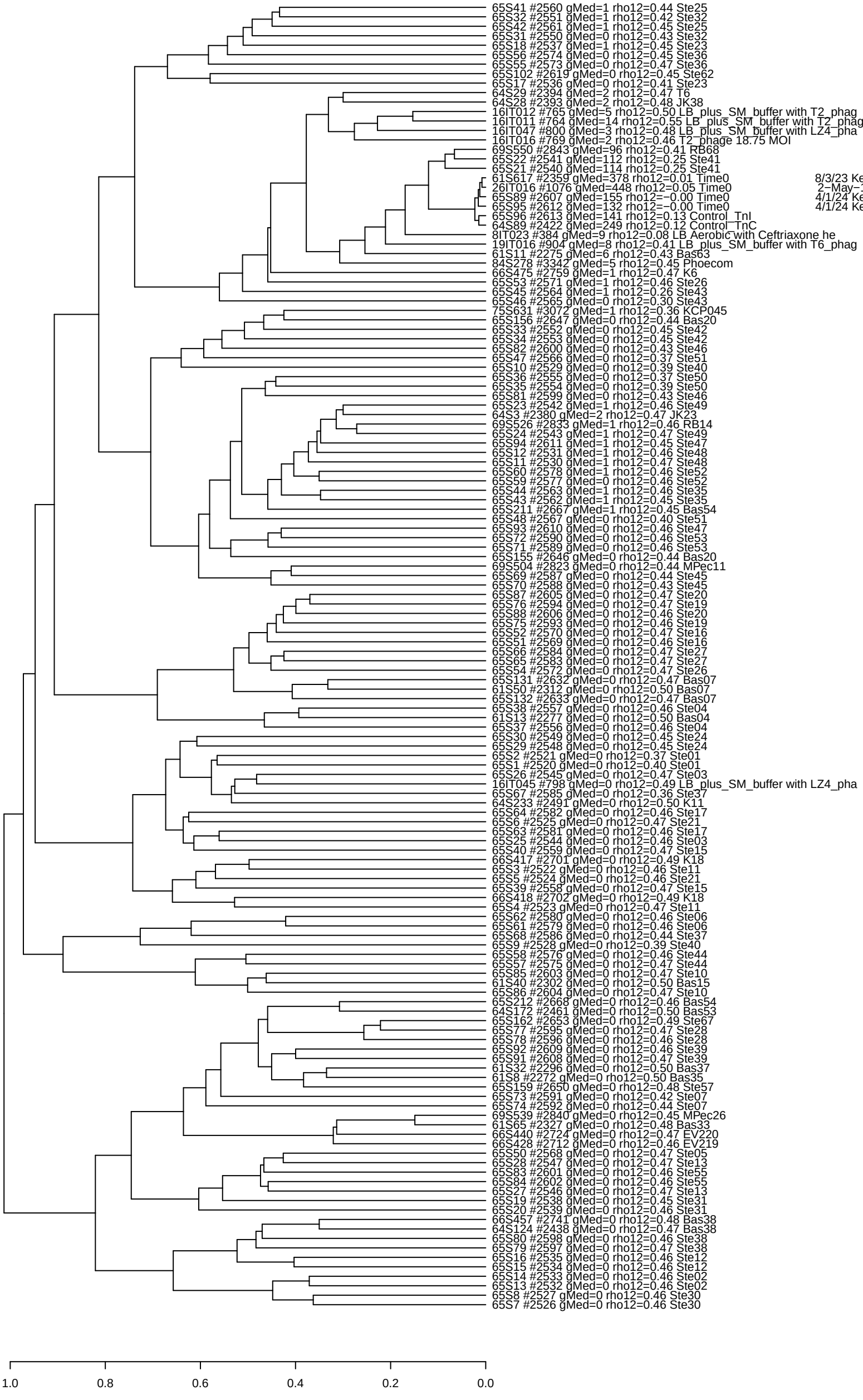
64S174 #2463 gMed=0 rho12=0.30 Bas69
64S173 #2462 gMed=0 rho12=0.35 Bas69
64S185 #2466 gMed=254 rho12=0.05 Time0 1/19/24 Keio_ML9_set
61S617 #2359 gMed=378 rho12=0.01 Time0 8/3/23 Keio_ML9_set6
64S189 #2468 gMed=238 rho12=0.03 Time0 1/19/24 Keio_ML9_set
64S186 #2467 gMed=220 rho12=0.06 Time0 1/19/24 Keio_ML9_set
9IT001 #458 gMed=106 rho12=0.04 Time0 7/20/2015 Keio_ML9_se
16IT081 #834 gMed=35 rho12=0.10 LB_plus_SM_buffer with I86_pha
16IT080 #833 gMed=12 rho12=0.30 LB_plus_SM_buffer with I86_pha
4IT077 #285 gMed=173 rho12=−0.02 Time0 3/20/2015 Keio_ML9_s
71S165 #2868 gMed=7 rho12=0.32 MPec3
64S136 #2443 gMed=45 rho12=0.12 Bas42
16IT069 #822 gMed=2 rho12=0.53 LB_plus_SM_buffer with T4delta
69S526 #2833 gMed=1 rho12=0.46 RB14
64S169 #2458 gMed=2 rho12=0.38 Bas26
61S11 #2275 gMed=6 rho12=0.43 Bas63
19IT025 #913 gMed=11 rho12=0.39 LB_plus_SM_buffer with LZ4_pha
64S170 #2459 gMed=4 rho12=0.37 Bas26
64S158 #2453 gMed=3 rho12=0.34 Bas24
16IT073 #826 gMed=7 rho12=0.40 LB_plus_SM_buffer with CI1857_
64S146 #2447 gMed=2 rho12=0.44 Bas23
64S145 #2446 gMed=1 rho12=0.48 Bas23
64S135 #2442 gMed=0 rho12=0.41 Bas42
64S147 #2448 gMed=0 rho12=0.49 Bas44
61S60 #2322 gMed=0 rho12=0.50 Laval1263
64S148 #2449 gMed=0 rho12=0.50 Bas44
64S150 #2451 gMed=0 rho12=0.49 Bas64
64S149 #2450 gMed=0 rho12=0.49 Bas64
65S162 #2653 gMed=0 rho12=0.49 Ste67
61S76 #2338 gMed=0 rho12=0.48 Bas20
66S403 #2687 gMed=0 rho12=0.48 EV156
64S172 #2461 gMed=0 rho12=0.50 Bas53
64S253 #2500 gMed=0 rho12=0.50 Bas67
64S171 #2460 gMed=0 rho12=0.50 Bas53
61S33 #2297 gMed=0 rho12=0.50 Bas54
64S113 #2434 gMed=0 rho12=0.50 Bas57
64S114 #2435 gMed=0 rho12=0.50 Bas57
64S112 #2433 gMed=0 rho12=0.50 Bas36
64S111 #2432 gMed=0 rho12=0.49 Bas36
64S161 #2456 gMed=0 rho12=0.46 Bas65
64S162 #2457 gMed=0 rho12=0.42 Bas65
64S138 #2445 gMed=0 rho12=0.42 Bas62
64S137 #2444 gMed=0 rho12=0.40 Bas62
64S157 #2452 gMed=0 rho12=0.41 Bas24
64S122 #2437 gMed=0 rho12=0.49 Bas11
64S121 #2436 gMed=0 rho12=0.49 Bas11
64S98 #2425 gMed=1 rho12=0.45 Bas02
64S97 #2424 gMed=0 rho12=0.45 Bas02
61S45 #2307 gMed=0 rho12=0.50 Bas56
61S9 #2273 gMed=0 rho12=0.50 Bas51
64S102 #2429 gMed=0 rho12=0.50 Bas55
64S101 #2428 gMed=0 rho12=0.50 Bas55
66S457 #2741 gMed=0 rho12=0.48 Bas38
64S124 #2438 gMed=0 rho12=0.47 Bas38
64S26 #2391 gMed=0 rho12=0.48 Laval1259
61S21 #2285 gMed=0 rho12=0.50 Bas52
61S22 #2286 gMed=0 rho12=0.50 Bas52
64S126 #2440 gMed=0 rho12=0.48 Bas58
64S125 #2439 gMed=0 rho12=0.49 Bas58
65S124 #2629 gMed=0 rho12=0.47 Phi92
64S159 #2454 gMed=0 rho12=0.49 Bas50
64S160 #2455 gMed=0 rho12=0.49 Bas50
64S182 #2465 gMed=0 rho12=0.50 Bas30
64S181 #2464 gMed=0 rho12=0.49 Bas30
66S445 #2729 gMed=0 rho12=0.49 Bas33
64S100 #2427 gMed=0 rho12=0.50 Bas32
66S415 #2699 gMed=0 rho12=0.49 EV212
61S41 #2303 gMed=0 rho12=0.50 Bas29
64S99 #2426 gMed=0 rho12=0.50 Bas32

1.0 0.8 0.6 0.4 0.2 0.0

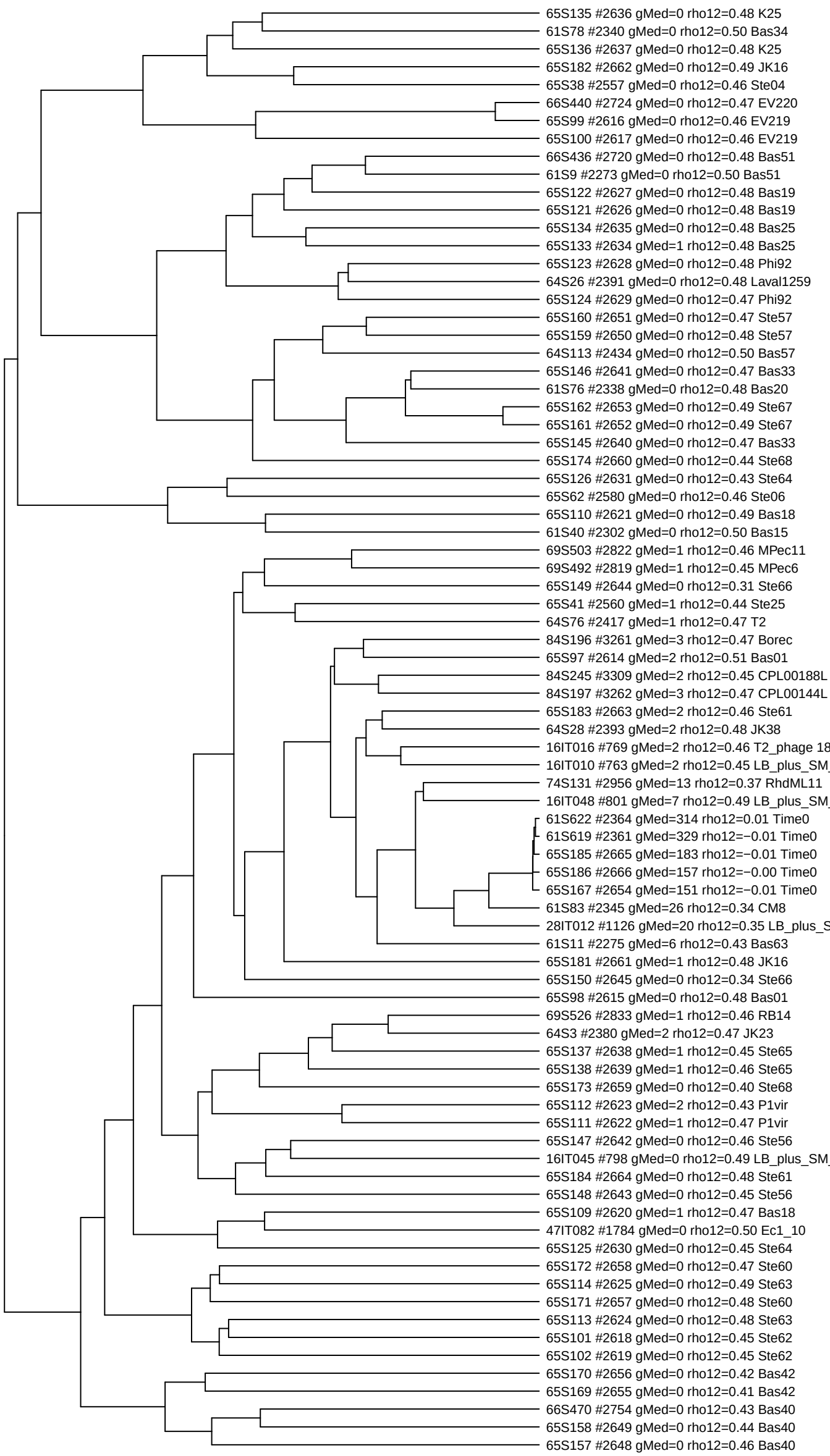
1/29/24 Keio_ML9_set64 and similar samples (clustered by log−count)



4/1/24 Keio_ML9_set65 and similar samples
(clustered by log−count)



4/11/24 Keio_ML9_set65 and similar samples (clustered by log−count)

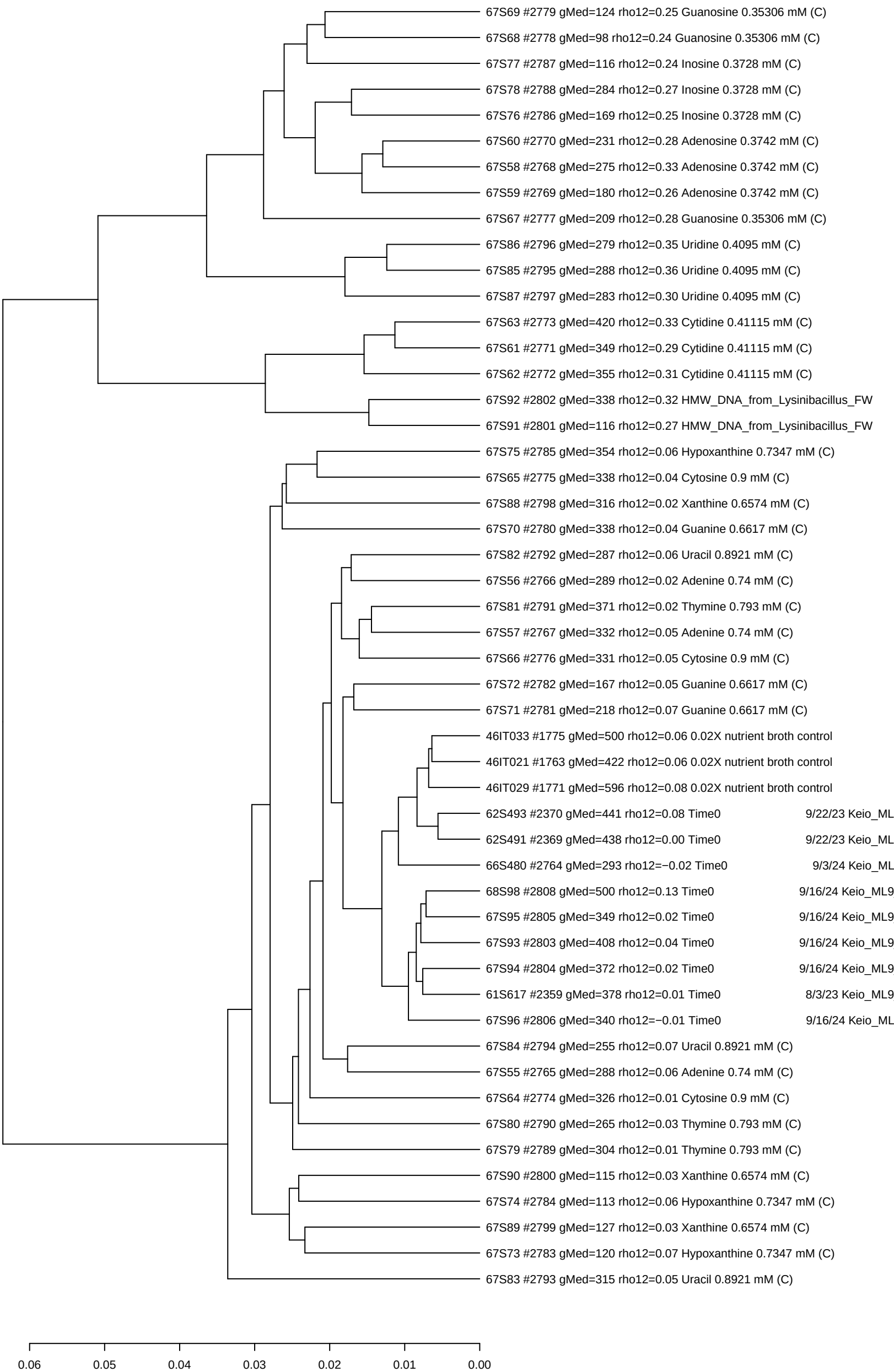


9/3/24 Keio_ML9_set66 and similar samples
(clustered by log−count)

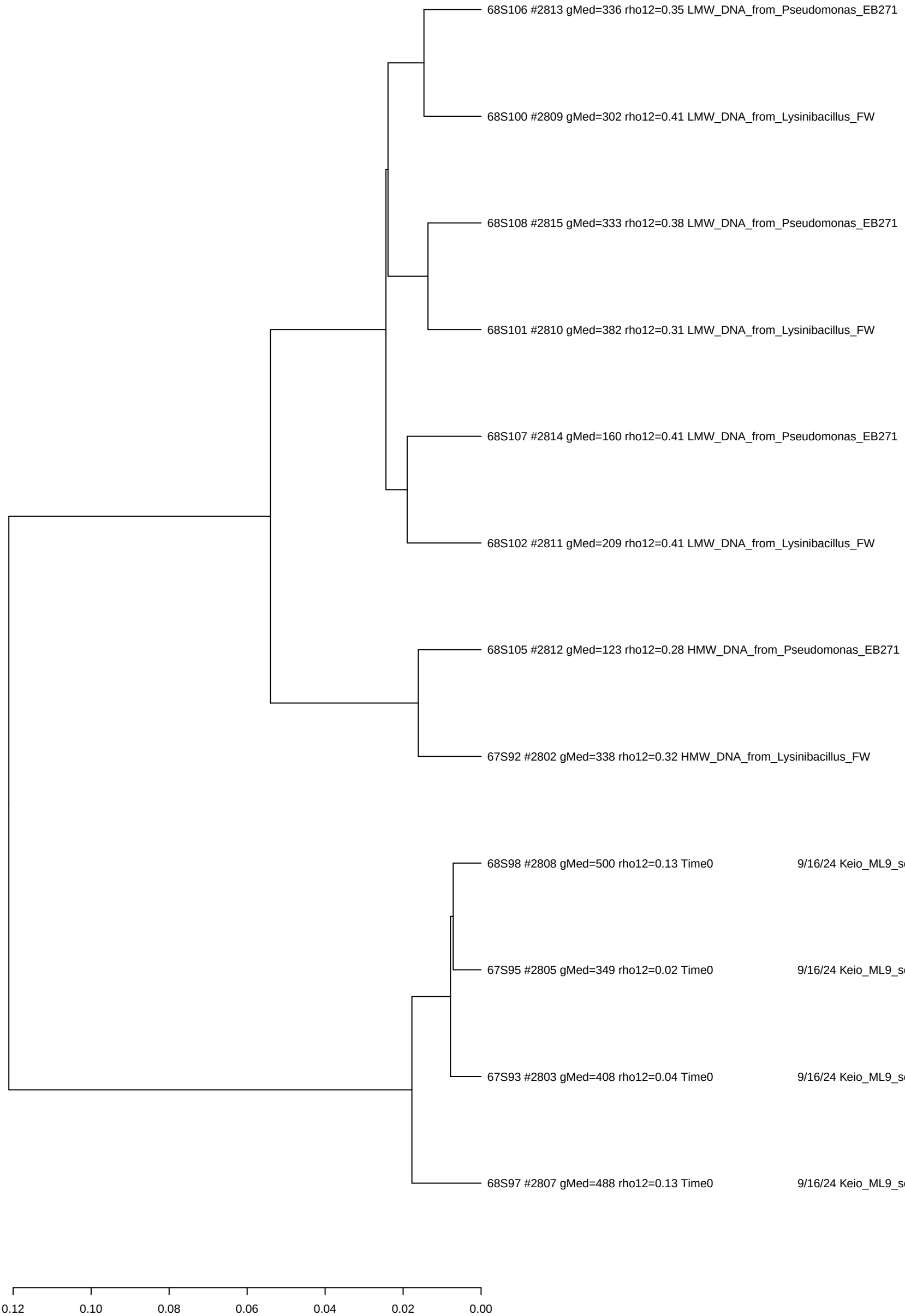
69S503 #2822 gMed=1 rho12=0.46 MPec11
66S469 #2753 gMed=0 rho12=0.41 Bas40
66S470 #2754 gMed=0 rho12=0.43 Bas40
66S388 #2672 gMed=0 rho12=0.45 Bas42
66S387 #2671 gMed=0 rho12=0.46 Bas42
66S461 #2745 gMed=0 rho12=0.49 K30
61S60 #2322 gMed=0 rho12=0.50 Laval1263
66S462 #2746 gMed=0 rho12=0.49 K30
66S399 #2683 gMed=0 rho12=0.49 Bas44
66S473 #2757 gMed=0 rho12=0.48 JK42
64S13 #2384 gMed=0 rho12=0.49 Laval1257
66S474 #2758 gMed=0 rho12=0.48 JK42
66S400 #2684 gMed=0 rho12=0.48 Bas44
66S406 #2690 gMed=0 rho12=0.45 K9
19IT031 #919 gMed=0 rho12=0.49 LB_plus_SM_buffer with CEV2_ph
66S417 #2701 gMed=0 rho12=0.49 K18
30IT056 #1140 gMed=0 rho12=0.50 T6_phage_62.5_MOI
66S418 #2702 gMed=0 rho12=0.49 K18
66S465 #2749 gMed=0 rho12=0.47 LZ3
66S466 #2750 gMed=0 rho12=0.48 LZ3
64S233 #2491 gMed=0 rho12=0.50 K11
66S405 #2689 gMed=0 rho12=0.44 K9
66S430 #2714 gMed=0 rho12=0.49 K21
66S429 #2713 gMed=0 rho12=0.49 K21
66S398 #2682 gMed=0 rho12=0.47 Bas20
66S444 #2728 gMed=0 rho12=0.48 M1
66S443 #2727 gMed=0 rho12=0.48 M1
66S397 #2681 gMed=0 rho12=0.49 Bas20
66S408 #2692 gMed=0 rho12=0.48 RB51
66S407 #2691 gMed=0 rho12=0.49 RB51
66S403 #2687 gMed=0 rho12=0.48 EV156
65S162 #2653 gMed=0 rho12=0.49 Ste67
66S404 #2688 gMed=0 rho12=0.48 EV156
64S219 #2483 gMed=0 rho12=0.49 EV169
64S172 #2461 gMed=0 rho12=0.50 Bas53
61S33 #2297 gMed=0 rho12=0.50 Bas54
66S436 #2720 gMed=0 rho12=0.48 Bas51
61S9 #2273 gMed=0 rho12=0.50 Bas51
66S435 #2719 gMed=0 rho12=0.48 Bas51
66S459 #2743 gMed=0 rho12=0.48 Bas55
66S460 #2744 gMed=0 rho12=0.49 Bas55
66S458 #2742 gMed=0 rho12=0.48 Bas38
66S457 #2741 gMed=0 rho12=0.48 Bas38
66S442 #2726 gMed=0 rho12=0.48 Ox4
66S441 #2725 gMed=0 rho12=0.48 Ox4
69S513 #2826 gMed=0 rho12=0.46 TulB
66S454 #2738 gMed=0 rho12=0.48 TulB
66S453 #2737 gMed=0 rho12=0.48 TulB
66S450 #2734 gMed=0 rho12=0.48 K20
66S449 #2733 gMed=0 rho12=0.48 K20
66S424 #2708 gMed=0 rho12=0.48 Bas46
66S423 #2707 gMed=0 rho12=0.48 Bas46
66S478 #2762 gMed=0 rho12=0.48 RB69
65S8 #2527 gMed=0 rho12=0.46 Ste30
66S477 #2761 gMed=0 rho12=0.48 RB69
66S392 #2676 gMed=0 rho12=0.47 EV116
66S391 #2675 gMed=0 rho12=0.48 EV116
69S539 #2840 gMed=0 rho12=0.45 MPec26
66S439 #2723 gMed=0 rho12=0.47 EV220
66S440 #2724 gMed=0 rho12=0.47 EV220
65S99 #2616 gMed=0 rho12=0.46 EV219
66S428 #2712 gMed=0 rho12=0.46 EV219
66S427 #2711 gMed=0 rho12=0.47 EV219
66S467 #2751 gMed=0 rho12=0.44 RB38
66S446 #2730 gMed=0 rho12=0.49 Bas33
61S41 #2303 gMed=0 rho12=0.50 Bas29
66S445 #2729 gMed=0 rho12=0.49 Bas33
66S434 #2718 gMed=0 rho12=0.49 Bas32
66S416 #2700 gMed=0 rho12=0.49 EV212
66S415 #2699 gMed=0 rho12=0.49 EV212
66S393 #2677 gMed=0 rho12=0.49 K8
66S433 #2717 gMed=0 rho12=0.49 Bas32
66S394 #2678 gMed=0 rho12=0.49 K8
65S81 #2599 gMed=0 rho12=0.43 Ste46
64S218 #2482 gMed=0 rho12=0.49 Bas46
65S60 #2578 gMed=1 rho12=0.46 Ste52
65S59 #2577 gMed=0 rho12=0.46 Ste52
65S44 #2563 gMed=1 rho12=0.46 Ste35
64S4 #2381 gMed=2 rho12=0.45 JK23
66S410 #2694 gMed=1 rho12=0.39 Bas24
64S158 #2453 gMed=3 rho12=0.34 Bas24
66S409 #2693 gMed=0 rho12=0.39 Bas24
66S395 #2679 gMed=0 rho12=0.44 L25
66S396 #2680 gMed=0 rho12=0.48 L25
66S432 #2716 gMed=0 rho12=0.43 Ox2
65S47 #2566 gMed=0 rho12=0.37 Ste51
66S468 #2752 gMed=0 rho12=0.44 RB38
66S431 #2715 gMed=0 rho12=0.48 Ox2
66S412 #2696 gMed=0 rho12=0.42 Bas45
66S438 #2722 gMed=1 rho12=0.46 TP14
66S437 #2721 gMed=1 rho12=0.35 TP14
66S479 #2763 gMed=173 rho12=0.11 Control_TnM
66S452 #2736 gMed=179 rho12=0.07 CBA120
66S464 #2748 gMed=184 rho12=0.10 HSDP3
66S463 #2747 gMed=204 rho12=0.10 HSDP3
61S96 #2358 gMed=292 rho12=0.16 Control_Tn2
61S90 #2352 gMed=289 rho12=0.15 Control_Tn1
66S451 #2735 gMed=195 rho12=0.13 CBA120
66S413 #2697 gMed=397 rho12=0.01 Time0 9/3/24 Keio_ML9_set6
61S617 #2359 gMed=378 rho12=0.01 Time0 8/3/23 Keio_ML9_set6
66S414 #2698 gMed=365 rho12=−0.02 Time0 9/3/24 Keio_ML9_set
66S480 #2764 gMed=293 rho12=−0.02 Time0 9/3/24 Keio_ML9_set
65S186 #2666 gMed=157 rho12=−0.00 Time0 4/11/24 Keio_ML9_se
65S167 #2654 gMed=151 rho12=−0.01 Time0 4/11/24 Keio_ML9_se
66S401 #2685 gMed=117 rho12=0.17 TP4
66S472 #2756 gMed=97 rho12=0.17 TP1
66S402 #2686 gMed=141 rho12=0.12 TP4
49IT037 #1898 gMed=38 rho12=0.02 Time0 19−May−21 Keio_ML9_
66S389 #2673 gMed=69 rho12=0.17 TP2
66S471 #2755 gMed=26 rho12=−0.01 TP1
66S386 #2670 gMed=157 rho12=0.38 Bas18
66S385 #2669 gMed=75 rho12=0.41 Bas18
66S390 #2674 gMed=22 rho12=0.33 TP2
69S536 #2837 gMed=25 rho12=0.12 TP2
66S422 #2706 gMed=78 rho12=0.31 Bas26
66S421 #2705 gMed=21 rho12=0.38 Bas26
84S195 #3260 gMed=12 rho12=0.39 Borec
19IT016 #904 gMed=8 rho12=0.41 LB_plus_SM_buffer with T6_phag
73S496 #2898 gMed=6 rho12=0.41 T4_MOI10_Calbicans
16IT019 #772 gMed=6 rho12=0.50 LB_plus_SM_buffer with T2_phag
16IT016 #769 gMed=2 rho12=0.46 T2_phage 18.75 MOI
84S217 #3282 gMed=2 rho12=0.42 CM8m4
66S426 #2710 gMed=4 rho12=0.42 TP12
66S425 #2709 gMed=4 rho12=0.43 TP12
66S475 #2759 gMed=1 rho12=0.47 K6
66S456 #2740 gMed=0 rho12=0.35 K3
66S455 #2739 gMed=0 rho12=0.38 K3
66S420 #2704 gMed=0 rho12=0.39 RB49
66S419 #2703 gMed=0 rho12=0.42 RB49
66S411 #2695 gMed=0 rho12=0.41 Bas45
66S476 #2760 gMed=0 rho12=0.48 K6
61S40 #2302 gMed=0 rho12=0.50 Bas15

1.0 0.8 0.6 0.4 0.2 0.0

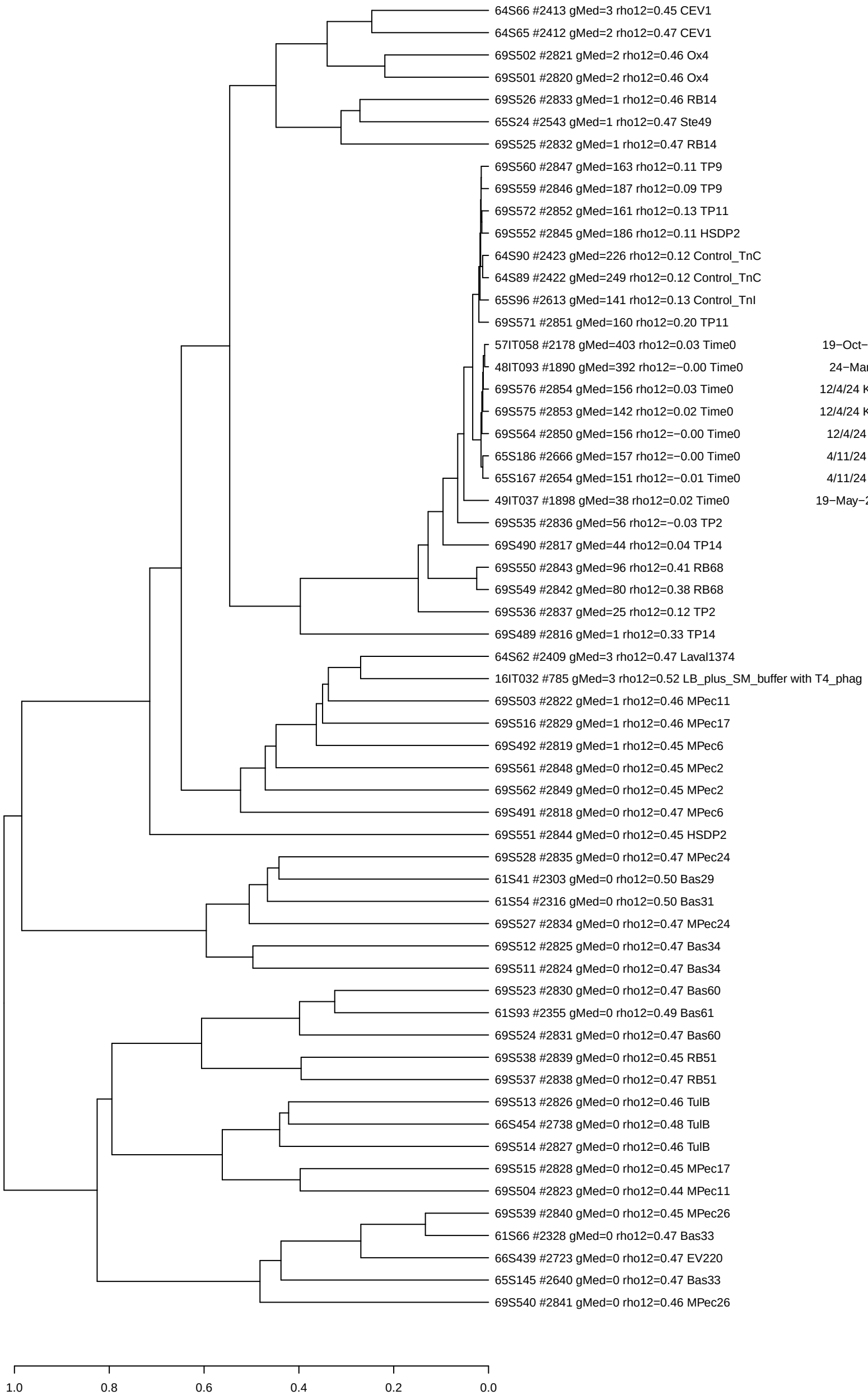
9/16/24 Keio_ML9_set67 and similar samples
(clustered by log−count)



9/16/24 Keio_ML9_set68 and similar samples (clustered by log−count)

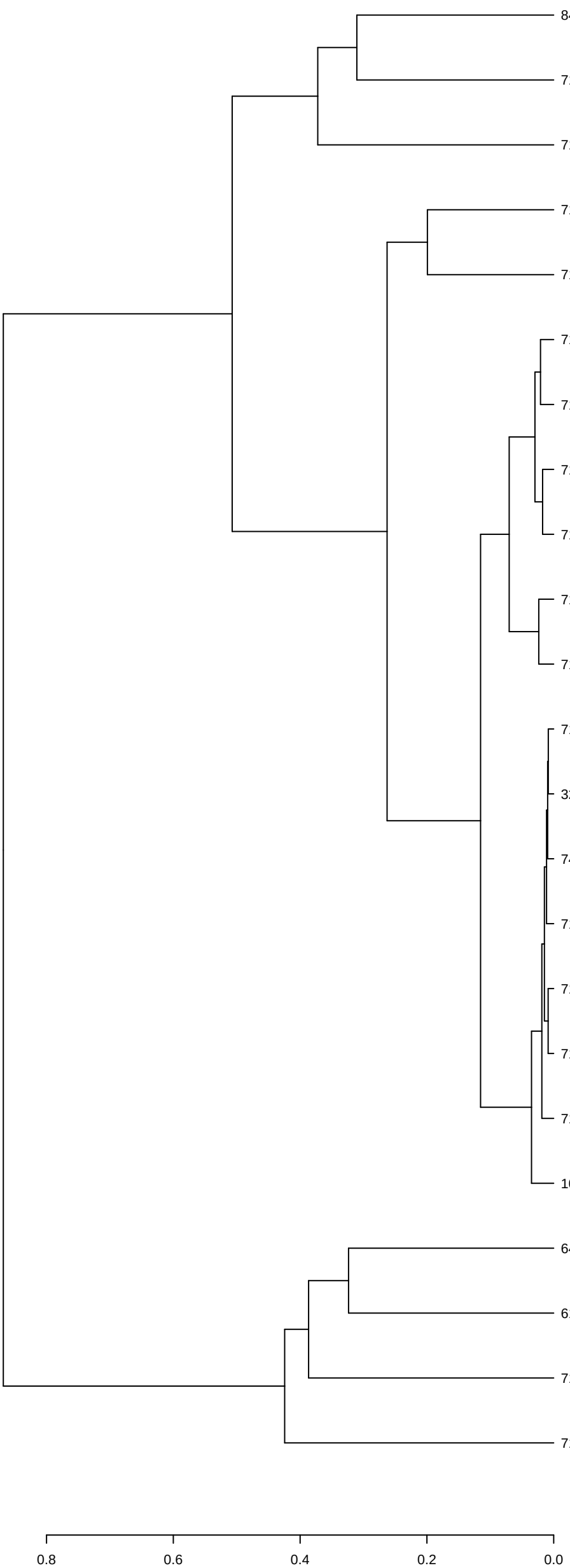


12/4/24 Keio_ML9a_set69 and similar samples (clustered by log−count)

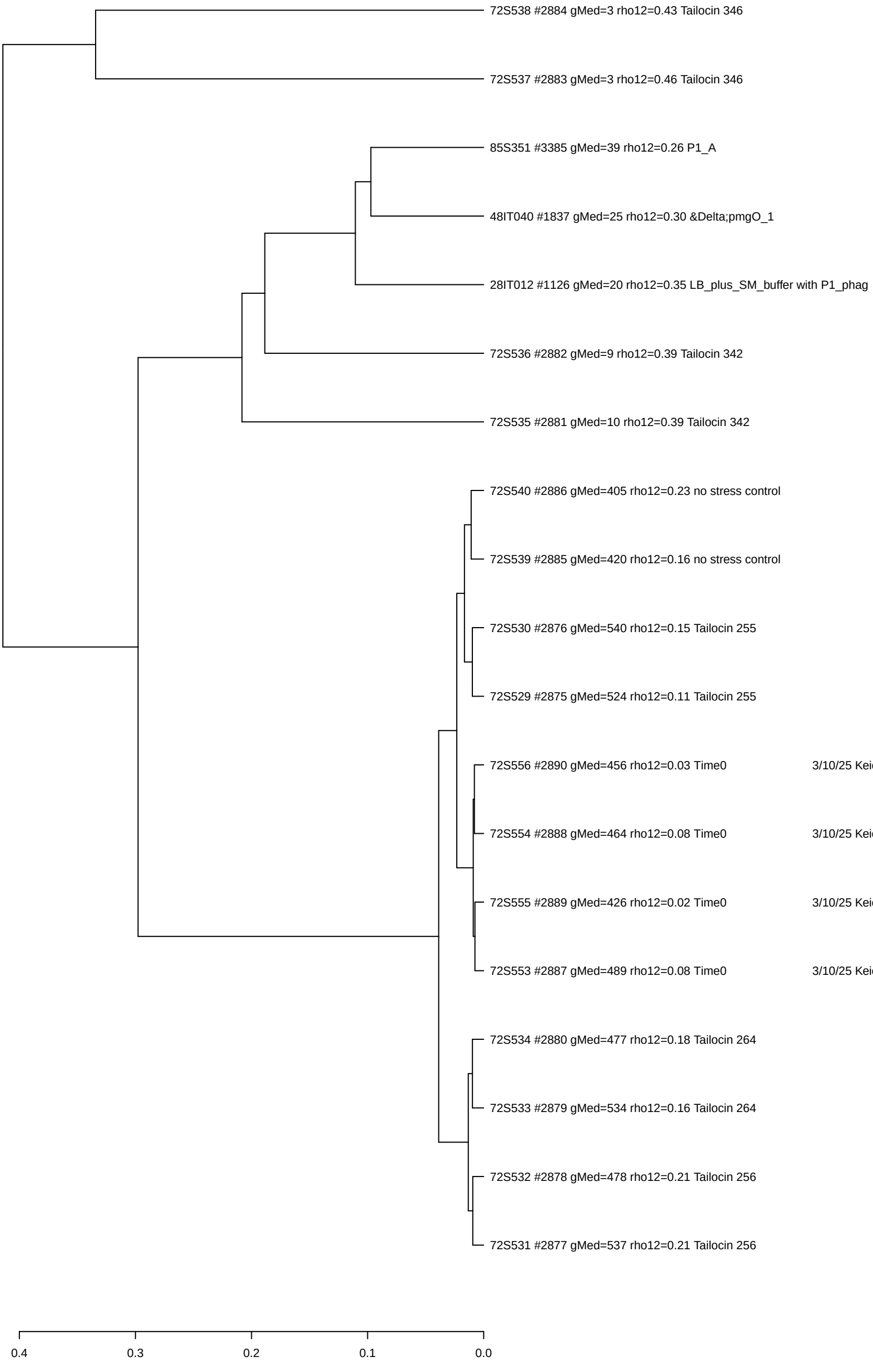


09/19/2024 Keio_ML9a_set70 and similar samples (clustered by log−count)

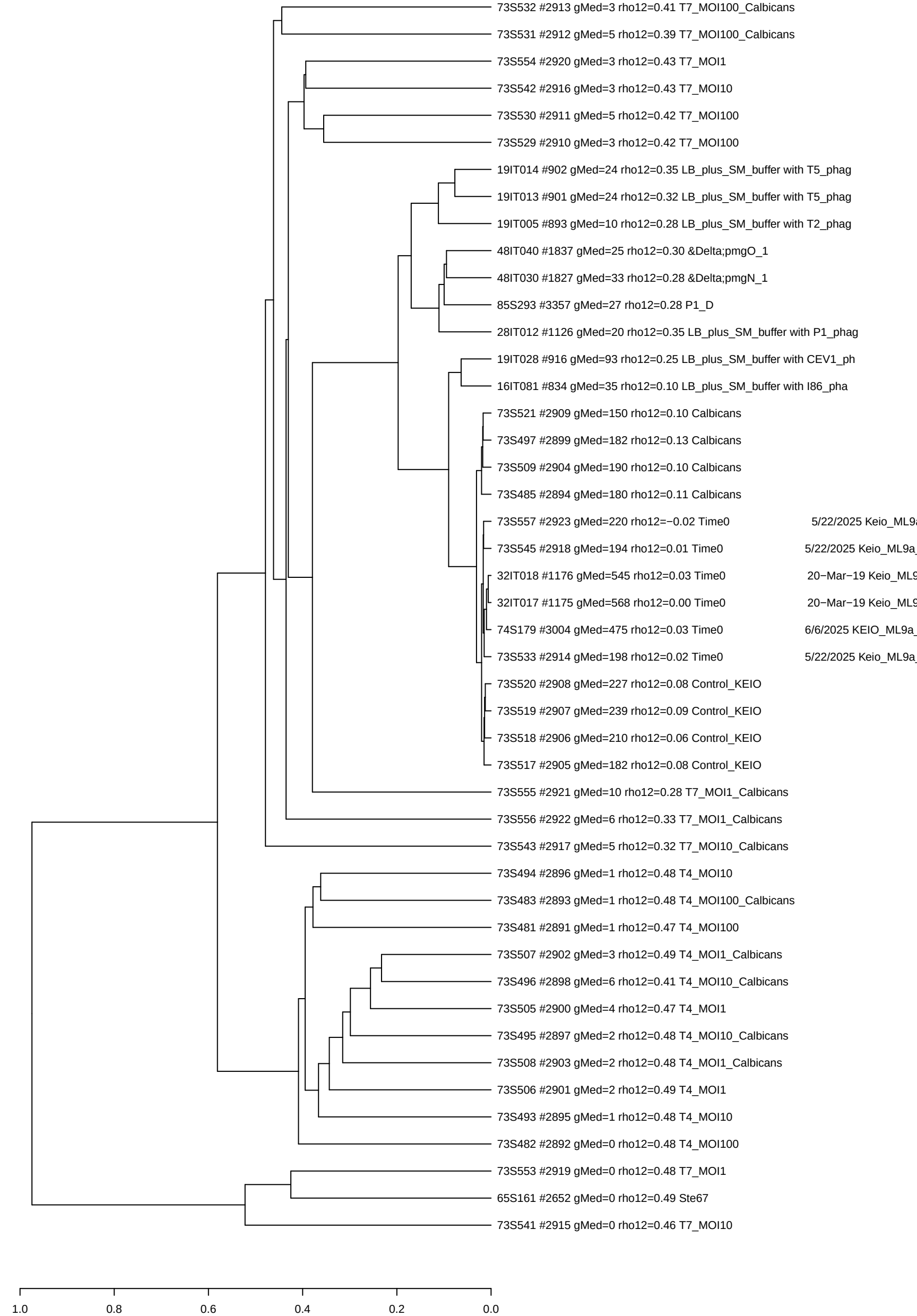
12/16/24 Keio_ML9a_set71 and similar samples (clustered by log−count)



3/10/25 Keio_ML9_set72 and similar samples (clustered by log−count)

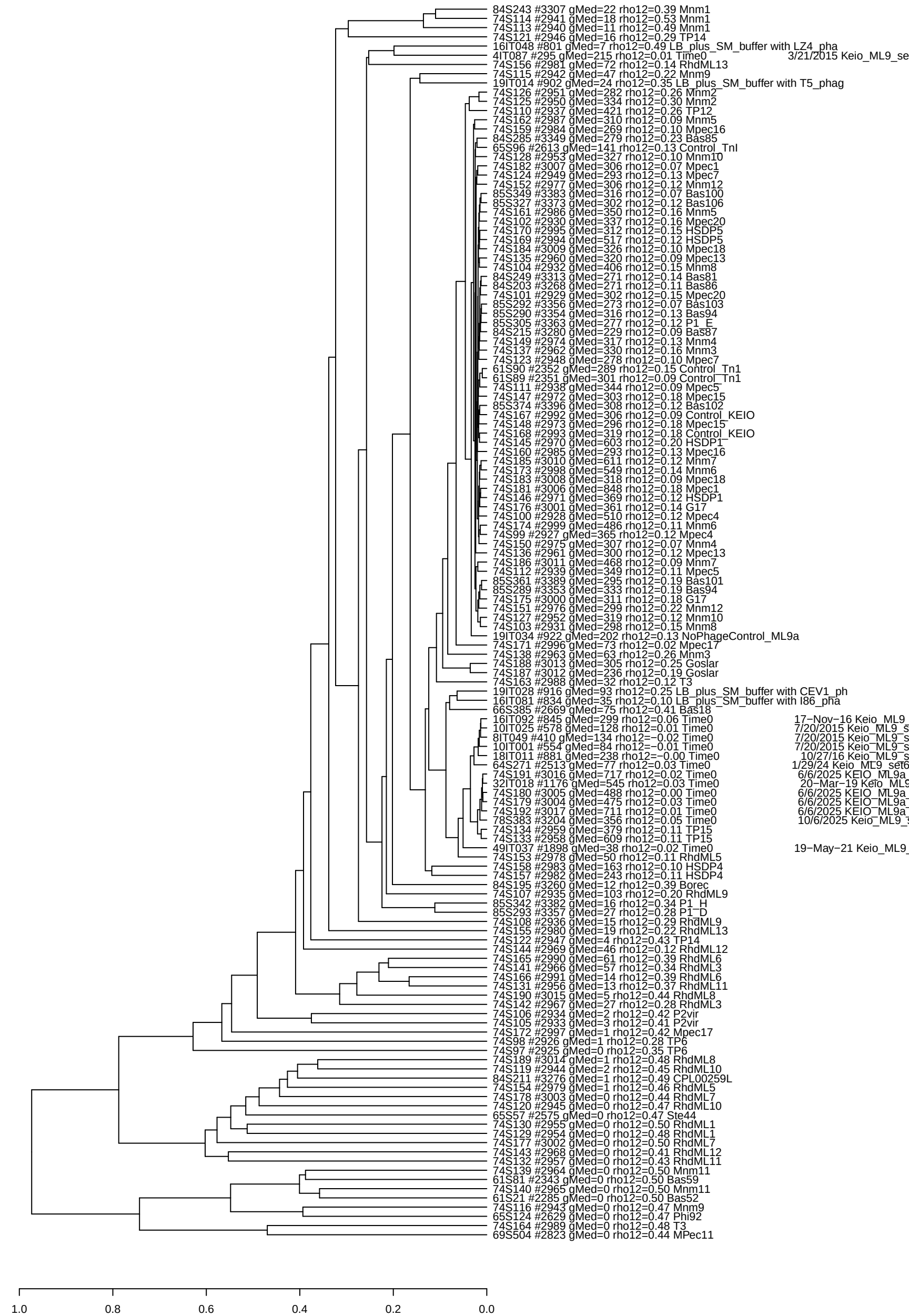


5/22/2025 Keio_ML9a_set73 and similar samples (clustered by log−count)

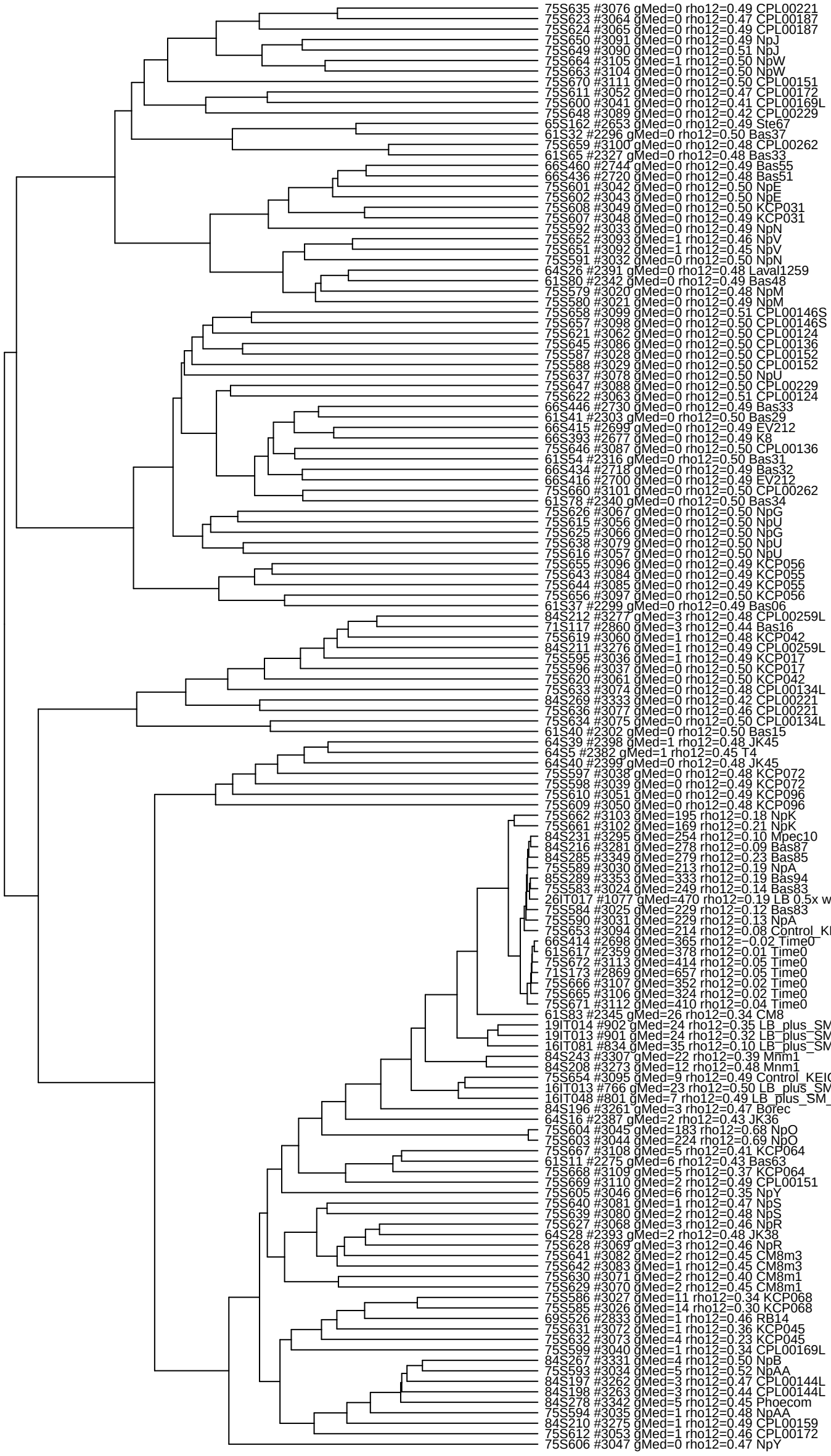


6/1/25 Keio_ML9a_set73 and similar samples
(clustered by log−count)

6/6/2025 KEIO_ML9a_set74 and similar samples (clustered by log−count)



8/11/2025 Keio_ML9_set75 and similar samples
(clustered by log−count)



8/11/2025 Keio_ML9_set76 and similar samples (clustered by log−count)

76S690 #3130 gMed=0 rho12=0.45 rfaD#3−1|T7phage
66S461 #2745 gMed=0 rho12=0.49 K30
76S694 #3134 gMed=0 rho12=0.49 rfaG#3 −1|T7phage
76S675 #3115 gMed=0 rho12=0.47 rfaD#1 −2|T7phage
76S717 #3157 gMed=0 rho12=0.49 T7og−3|T7phage
76S702 #3142 gMed=0 rho12=0.50 rfaG#4 −1|T7phage
66S431 #2715 gMed=0 rho12=0.48 Ox2
69S539 #2840 gMed=0 rho12=0.45 MPec26
65S162 #2653 gMed=0 rho12=0.49 Ste67
16IT024 #777 gMed=0 rho12=0.49 LB_plus_SM_buffer with T3_phag
65S61 #2579 gMed=0 rho12=0.46 Ste06
65S156 #2647 gMed=0 rho12=0.44 Bas20
64S98 #2425 gMed=1 rho12=0.45 Bas02
65S16 #2535 gMed=0 rho12=0.46 Ste12
76S704 #3144 gMed=0 rho12=0.51 rfaG#4 −3|T7phage
66S440 #2724 gMed=0 rho12=0.47 EV220
76S716 #3156 gMed=0 rho12=0.49 T7og−2|T7phage
76S697 #3137 gMed=0 rho12=0.51 rfaG#3 −4|T7phage
76S706 #3146 gMed=0 rho12=0.50 rfaD#5 −1|T7phage
76S688 #3128 gMed=0 rho12=0.49 rfaG#2 −3|T7phage
76S683 #3123 gMed=0 rho12=0.48 rfaD#2 −2|T7phage
76S679 #3119 gMed=0 rho12=0.49 rfaG#1 −2|T7phage
76S682 #3122 gMed=0 rho12=0.49 rfaD#2 −1|T7phage
76S685 #3125 gMed=0 rho12=0.49 rfaD#2 −4|T7phage
76S684 #3124 gMed=0 rho12=0.49 rfaD#2 −3|T7phage
76S698 #3138 gMed=0 rho12=0.46 rfaD#4 −1|T7phage
76S699 #3139 gMed=0 rho12=0.50 rfaD#4 −2|T7phage
76S678 #3118 gMed=0 rho12=0.47 rfaG#1 −1|T7phage
76S687 #3127 gMed=0 rho12=0.50 rfaG#2 −2|T7phage
76S681 #3121 gMed=0 rho12=0.49 rfaG#1 −4|T7phage
76S680 #3120 gMed=0 rho12=0.49 rfaG#1 −3|T7phage
76S705 #3145 gMed=0 rho12=0.51 rfaG#4 −4|T7phage
76S701 #3141 gMed=0 rho12=0.51 rfaD#4 −4|T7phage
76S691 #3131 gMed=0 rho12=0.49 rfaD#3−2|T7phage
76S700 #3140 gMed=0 rho12=0.49 rfaD#4 −3|T7phage
76S692 #3132 gMed=0 rho12=0.49 rfaD#3−3|T7phage
76S693 #3133 gMed=0 rho12=0.49 rfaD#3−4|T7phage
76S718 #3158 gMed=0 rho12=0.48 T7Lib−1|T7phage
76S696 #3136 gMed=0 rho12=0.46 rfaG#3 −3|T7phage
76S689 #3129 gMed=0 rho12=0.49 rfaG#2 −4|T7phage
76S703 #3143 gMed=0 rho12=0.48 rfaG#4 −2|T7phage
76S710 #3150 gMed=0 rho12=0.48 rfaG#5 −1|T7phage
76S695 #3135 gMed=0 rho12=0.46 rfaG#3 −2|T7phage
76S713 #3153 gMed=0 rho12=0.32 rfaG#5 −4|T7phage
76S712 #3152 gMed=0 rho12=0.42 rfaG#5 −3|T7phage
76S711 #3151 gMed=0 rho12=0.39 rfaG#5 −2|T7phage
76S674 #3114 gMed=0 rho12=0.49 rfaD#1 −1|T7phage
61S52 #2314 gMed=0 rho12=0.50 Bas16
76S676 #3116 gMed=0 rho12=0.49 rfaD#1 −3|T7phage
84S249 #3313 gMed=271 rho12=0.14 Bas81
84S228 #3293 gMed=291 rho12=0.15 Bas90
76S715 #3155 gMed=230 rho12=0.16 NoPhageControl|T7phage
76S714 #3154 gMed=232 rho12=0.11 NoPhageControl|T7phage
76S739 #3163 gMed=248 rho12=0.21 NoPhageControl|T7phage
76S738 #3162 gMed=230 rho12=0.19 NoPhageControl|T7phage
76S768 #3165 gMed=234 rho12=0.12 Time0 8/11/2025 Keio_ML9_s
76S767 #3164 gMed=233 rho12=0.16 Time0 8/11/2025 Keio_ML9_s
76S720 #3160 gMed=426 rho12=0.11 Time0 8/11/2025 Keio_ML9_s
74S179 #3004 gMed=475 rho12=0.03 Time0 6/6/2025 KEIO_ML9a_
76S723 #3161 gMed=358 rho12=0.11 Time0 8/11/2025 Keio_ML9_s
10IT001 #554 gMed=84 rho12=−0.01 Time0 7/20/2015 Keio_ML9_s
13IT041 #720 gMed=28 rho12=0.03 Nickel (II) chloride 2 mM
76S686 #3126 gMed=7 rho12=0.25 rfaG#2 −1|T7phage
76S707 #3147 gMed=0 rho12=0.36 rfaD#5 −2|T7phage
86S583 #3407 gMed=0 rho12=0.45 RfaG2A7
76S677 #3117 gMed=0 rho12=0.48 rfaD#1 −4|T7phage
76S709 #3149 gMed=0 rho12=0.47 rfaD#5 −4|T7phage
76S719 #3159 gMed=0 rho12=0.45 T7Lib−2|T7phage
64S209 #2479 gMed=0 rho12=0.48 K5
76S708 #3148 gMed=0 rho12=0.61 rfaD#5 −3|T7phage

1.0 0.8 0.6 0.4 0.2 0.0

10/6/2025 Keio_ML9_set78 and similar samples (clustered by log−count)

78S360 #3194 gMed=0 rho12=0.47 Pool6D12
78S352 #3186 gMed=1 rho12=0.46 Pool6D4
78S361 #3195 gMed=0 rho12=0.47 Pool6D13
78S294 #3168 gMed=0 rho12=0.47 PoolT9D6
78S353 #3187 gMed=1 rho12=0.46 Pool6D5
78S330 #3183 gMed=1 rho12=0.44 Pool16D12
78S325 #3180 gMed=1 rho12=0.45 Pool16D7
79S419 #3207 gMed=1 rho12=0.44 PoolT11D5
78S324 #3179 gMed=1 rho12=0.46 Pool16D6
78S354 #3188 gMed=1 rho12=0.45 Pool6D6
78S293 #3167 gMed=1 rho12=0.43 PoolT9D5
79S420 #3208 gMed=4 rho12=0.39 PoolT11D6
78S364 #3198 gMed=2 rho12=0.41 Pool6D16
78S355 #3189 gMed=1 rho12=0.44 Pool6D7
78S362 #3196 gMed=1 rho12=0.44 Pool6D14
78S357 #3191 gMed=1 rho12=0.46 Pool6D9
78S365 #3199 gMed=1 rho12=0.42 Pool6D17
78S328 #3182 gMed=1 rho12=0.45 Pool16D10
78S333 #3184 gMed=1 rho12=0.46 Pool16D15
78S363 #3197 gMed=1 rho12=0.46 Pool6D15
78S358 #3192 gMed=1 rho12=0.45 Pool6D10
78S356 #3190 gMed=1 rho12=0.44 Pool6D8
78S334 #3185 gMed=1 rho12=0.45 Pool16D16
78S327 #3181 gMed=1 rho12=0.47 Pool16D9
78S359 #3193 gMed=1 rho12=0.45 Pool6D11
78S323 #3178 gMed=1 rho12=0.46 Pool16D5
78S292 #3166 gMed=1 rho12=0.46 PoolT9D4
78S380 #3201 gMed=187 rho12=0.22 CTR
78S312 #3173 gMed=118 rho12=0.13 PoolT9D24
78S311 #3172 gMed=96 rho12=0.11 PoolT9D23
78S314 #3175 gMed=171 rho12=0.11 PoolT9D26
46IT023 #1765 gMed=475 rho12=0.24 Mixed culture; Bdellovibrio ba
16IT014 #767 gMed=389 rho12=0.23 LB
85S366 #3394 gMed=305 rho12=0.03 Time0 11/7/2025 Keio_ML9_s
84S287 #3351 gMed=295 rho12=0.03 Time0 10/30/2025 Keio_ML9
78S384 #3205 gMed=354 rho12=0.06 Time0 10/6/2025 Keio_ML9_s
78S381 #3202 gMed=425 rho12=0.03 Time0 10/6/2025 Keio_ML9_s
78S382 #3203 gMed=378 rho12=0.08 Time0 10/6/2025 Keio_ML9_s
74S180 #3005 gMed=488 rho12=0.00 Time0 6/6/2025 KEIO_ML9a_
78S383 #3204 gMed=356 rho12=0.05 Time0 10/6/2025 Keio_ML9_s
86S648 #3472 gMed=272 rho12=0.01 Time0 11/25/2025 Keio_ML9
45IT042 #1712 gMed=392 rho12=0.35 3 hr rep1_Tiberius_10fold_dilu
78S306 #3170 gMed=181 rho12=0.11 PoolT9D18
78S313 #3174 gMed=180 rho12=0.10 PoolT9D25
78S317 #3176 gMed=102 rho12=0.11 PoolT9D29
78S305 #3169 gMed=116 rho12=0.07 PoolT9D17
78S307 #3171 gMed=144 rho12=0.10 PoolT9D19
78S318 #3177 gMed=70 rho12=0.13 PoolT9D30
78S379 #3200 gMed=113 rho12=0.10 CTR
55IT045 #2041 gMed=34 rho12=0.36 QB_100_C2

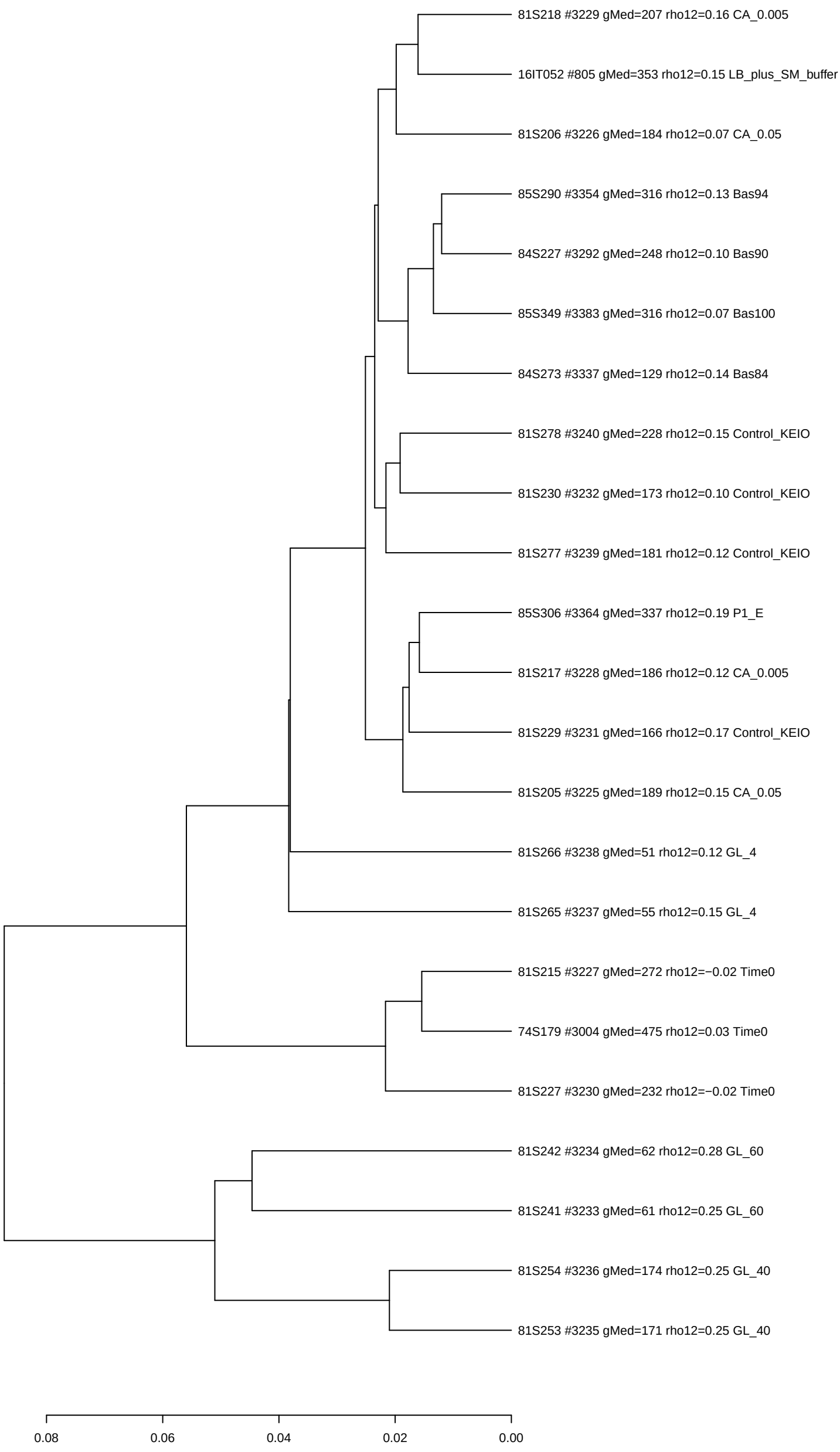
0.6 0.5 0.4 0.3 0.2 0.1 0.0

10/6/2025 and similar samples
(clustered by log−count)

79S423 #3211 gMed=1 rho12=0.48 PoolT11D9
79S421 #3209 gMed=1 rho12=0.49 PoolT11D7
79S422 #3210 gMed=1 rho12=0.45 PoolT11D8
79S426 #3214 gMed=1 rho12=0.45 PoolT11D12
79S419 #3207 gMed=1 rho12=0.44 PoolT11D5
79S424 #3212 gMed=1 rho12=0.47 PoolT11D10
79S429 #3215 gMed=1 rho12=0.44 PoolT11D15
79S433 #3218 gMed=1 rho12=0.44 PoolT11D19
79S425 #3213 gMed=2 rho12=0.45 PoolT11D11
79S430 #3216 gMed=1 rho12=0.45 PoolT11D16
79S432 #3217 gMed=1 rho12=0.45 PoolT11D18
79S418 #3206 gMed=1 rho12=0.45 PoolT11D4
79S479 #3220 gMed=135 rho12=0.15 CTR
79S478 #3219 gMed=155 rho12=0.09 CTR
79S480 #3221 gMed=106 rho12=0.11 CTR
55IT046 #2042 gMed=120 rho12=0.24 QB_100_C3
16IT014 #767 gMed=389 rho12=0.23 LB
79S420 #3208 gMed=4 rho12=0.39 PoolT11D6

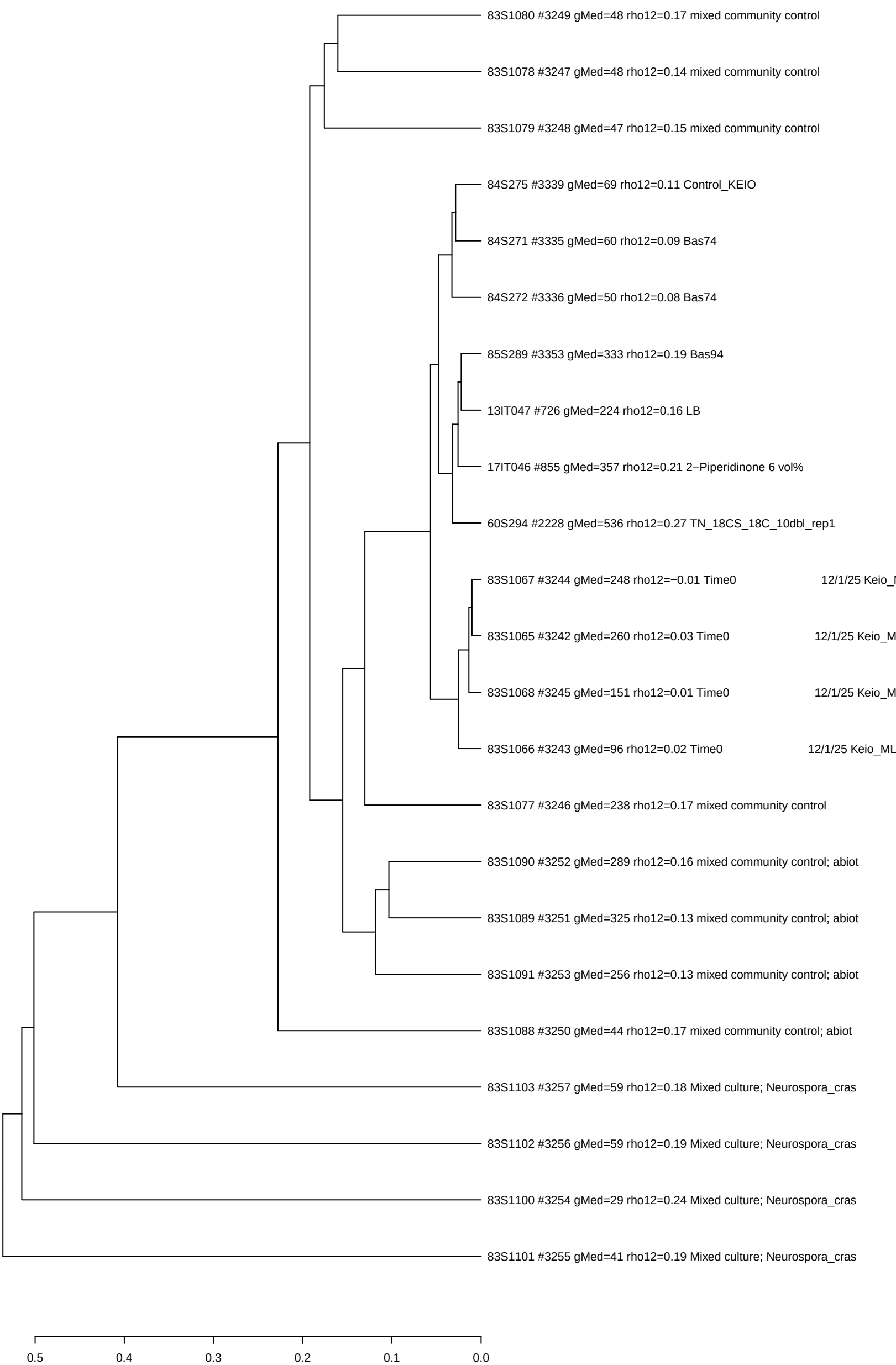
0.5 0.4 0.3 0.2 0.1 0.0

5/17/2025 Keio_ML9_set81 and similar samples (clustered by log−count)

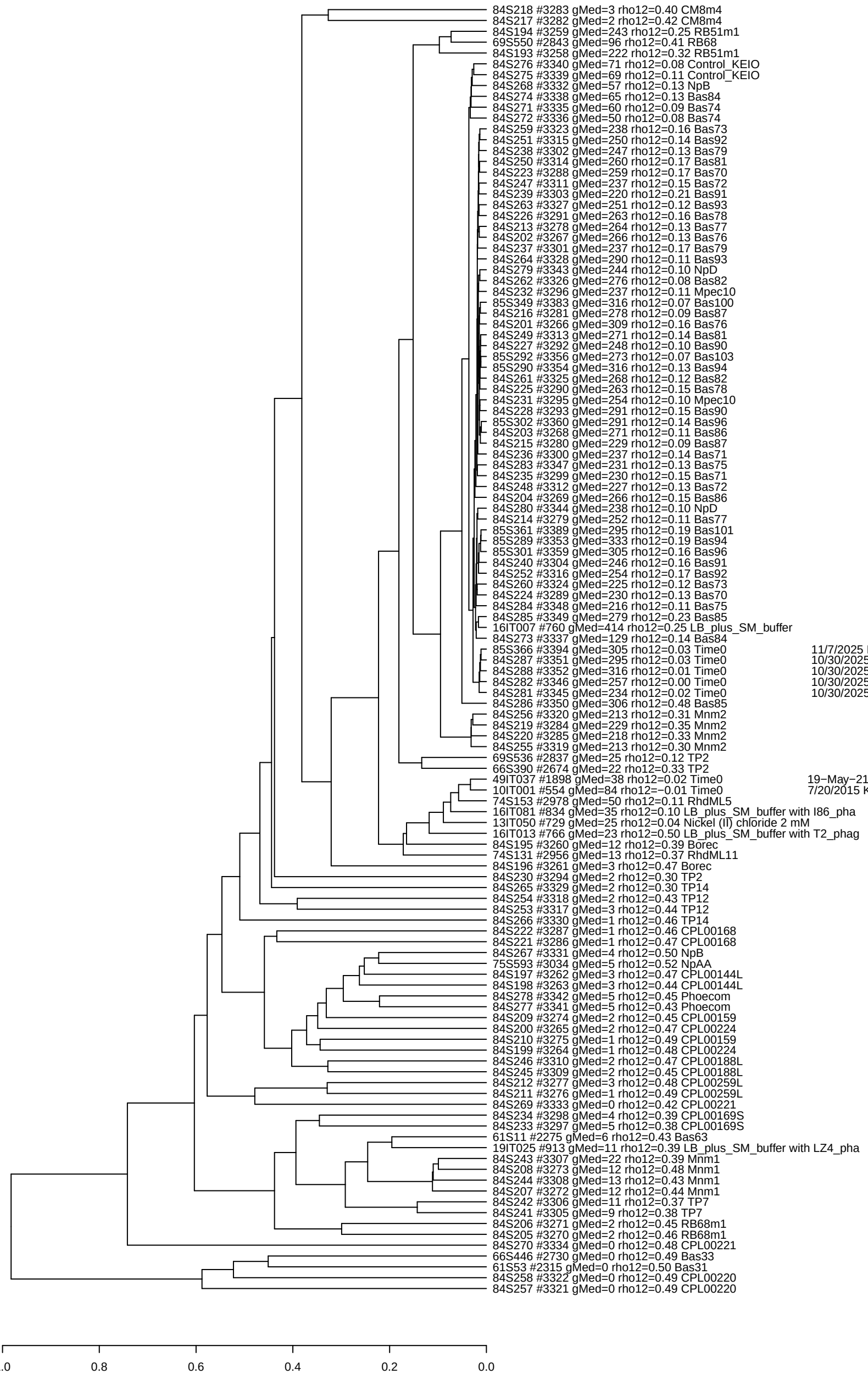


set82 Keio_ML9_set82 and similar samples
(clustered by log−count)

12/1/25 Keio_ML9_set83 and similar samples (clustered by log−count)



10/30/2025 Keio_ML9_set84 and similar samples (clustered by log−count)

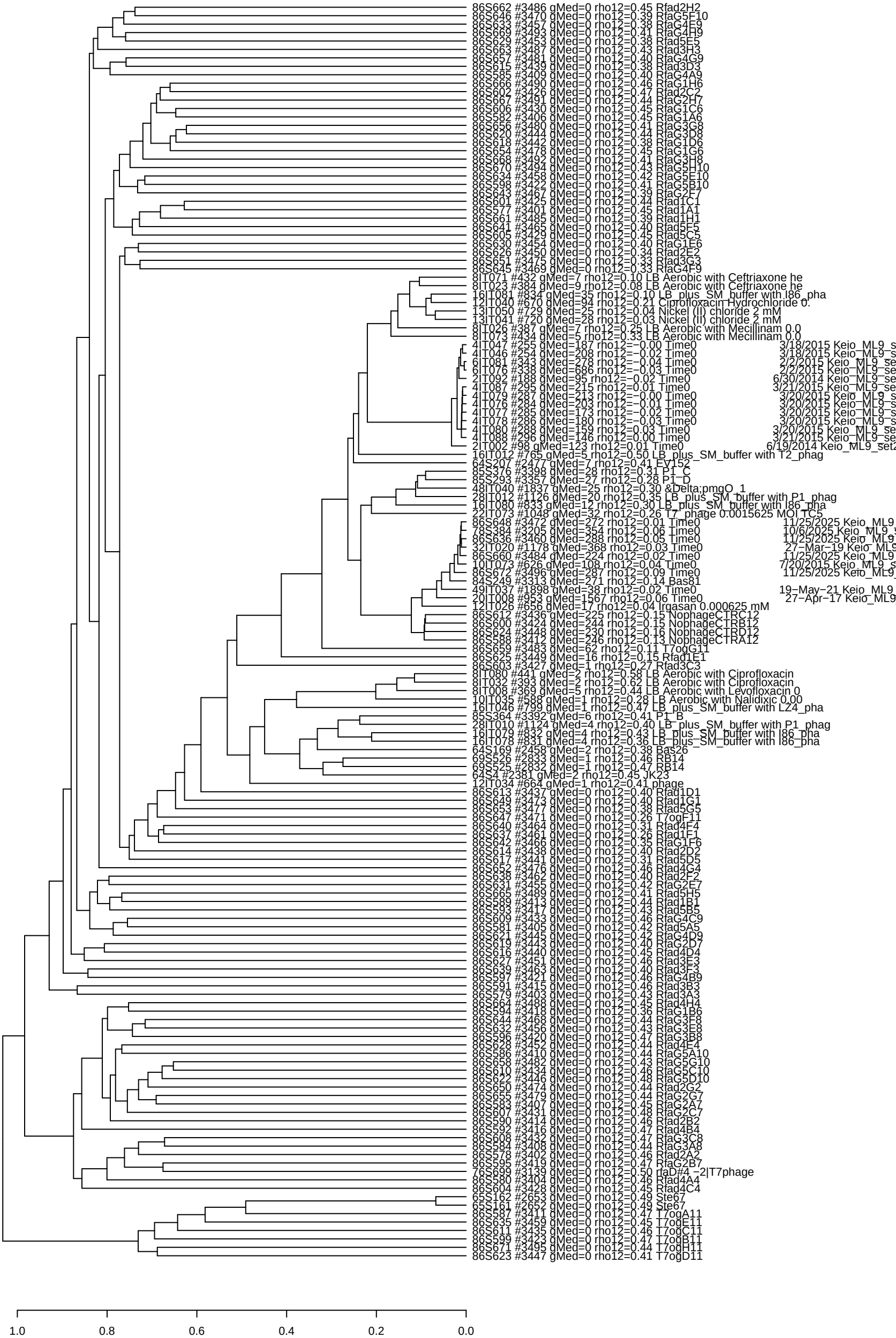


11/7/2025 Keio_ML9_set85 and similar samples (clustered by log−count)

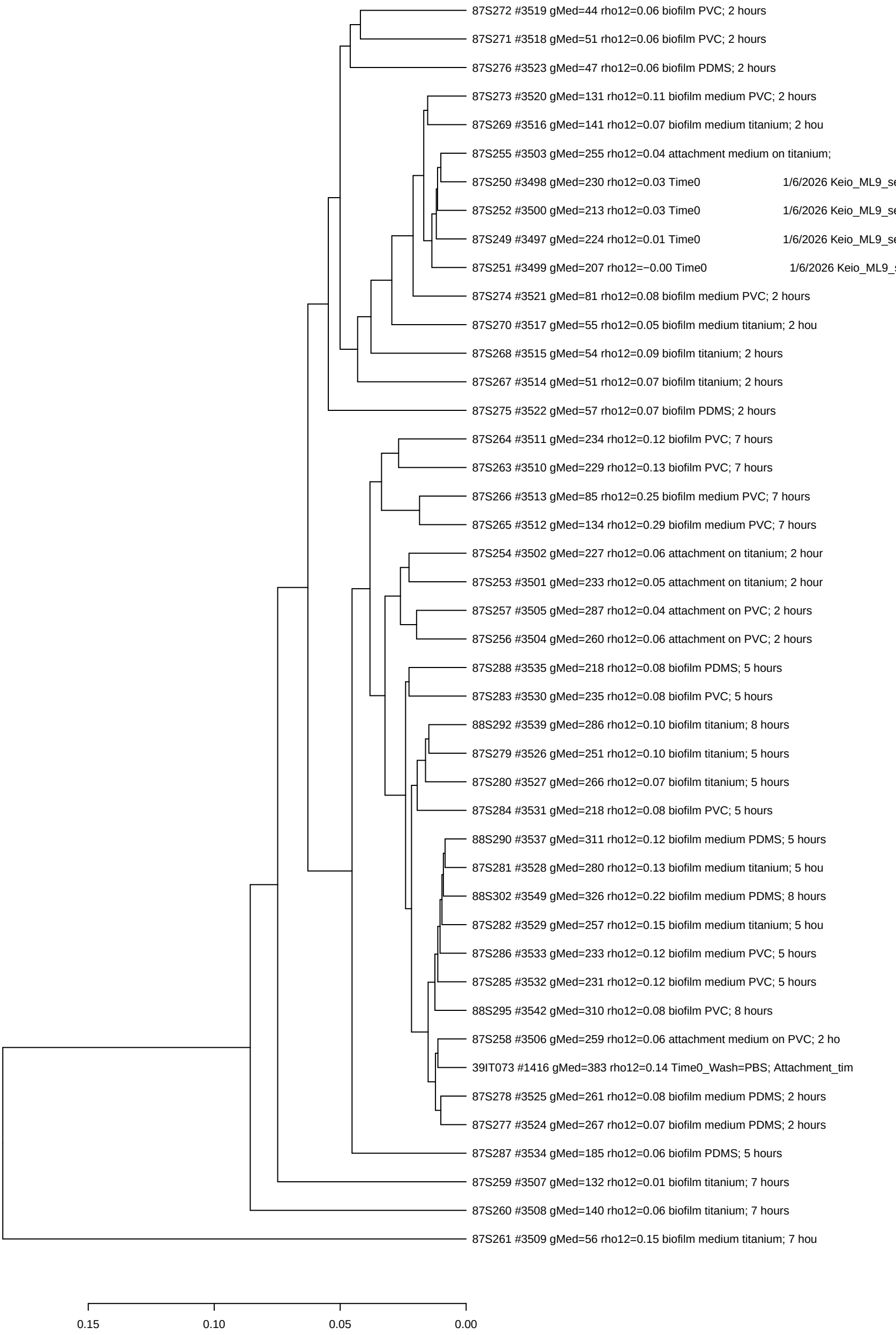
85S303 #3361 gMed=0 rho12=0.47 Bas104
69S504 #2823 gMed=0 rho12=0.44 MPec11
85S304 #3362 gMed=0 rho12=0.48 Bas104
84S198 #3263 gMed=3 rho12=0.44 CPL00144L
84S197 #3262 gMed=3 rho12=0.47 CPL00144L
85S340 #3380 gMed=1 rho12=0.47 CPL00160
85S339 #3379 gMed=1 rho12=0.47 CPL00160
85S375 #3397 gMed=50 rho12=0.23 P1_C
85S351 #3385 gMed=39 rho12=0.26 P1_A
85S352 #3386 gMed=41 rho12=0.27 P1_A
85S294 #3358 gMed=36 rho12=0.27 P1_D
85S293 #3357 gMed=27 rho12=0.28 P1_D
85S341 #3381 gMed=32 rho12=0.24 P1_H
85S363 #3391 gMed=28 rho12=0.25 P1_B
85S376 #3398 gMed=28 rho12=0.31 P1_C
85S342 #3382 gMed=16 rho12=0.34 P1_H
85S364 #3392 gMed=6 rho12=0.41 P1_B
9IT087 #544 gMed=4 rho12=0.46 LB Anaerobic with Cephalothin
85S349 #3383 gMed=316 rho12=0.07 Bas100
85S327 #3373 gMed=302 rho12=0.12 Bas106
85S316 #3368 gMed=277 rho12=0.07 Bas105
85S326 #3372 gMed=235 rho12=0.11 Bas98
85S302 #3360 gMed=291 rho12=0.14 Bas96
84S203 #3268 gMed=271 rho12=0.11 Bas86
84S227 #3292 gMed=248 rho12=0.10 Bas90
85S329 #3375 gMed=280 rho12=0.14 P1_G
85S292 #3356 gMed=273 rho12=0.07 Bas103
85S290 #3354 gMed=316 rho12=0.13 Bas94
85S305 #3363 gMed=277 rho12=0.12 P1_E
85S353 #3387 gMed=346 rho12=0.17 Control_KEIO
85S291 #3355 gMed=182 rho12=0.11 Bas103
85S318 #3370 gMed=297 rho12=0.16 P1_F
85S317 #3369 gMed=283 rho12=0.12 P1_F
85S373 #3395 gMed=253 rho12=0.10 Bas102
85S361 #3389 gMed=295 rho12=0.19 Bas101
85S289 #3353 gMed=333 rho12=0.19 Bas94
85S301 #3359 gMed=305 rho12=0.16 Bas96
85S306 #3364 gMed=337 rho12=0.19 P1_E
85S313 #3365 gMed=287 rho12=0.14 Bas97
85S354 #3388 gMed=272 rho12=0.17 Control_KEIO
85S328 #3374 gMed=278 rho12=0.08 Bas106
85S325 #3371 gMed=296 rho12=0.09 Bas98
85S350 #3384 gMed=301 rho12=0.06 Bas100
85S330 #3376 gMed=308 rho12=0.12 P1_G
85S374 #3396 gMed=308 rho12=0.12 Bas102
85S337 #3377 gMed=276 rho12=0.08 Bas99
85S315 #3367 gMed=263 rho12=0.09 Bas105
85S314 #3366 gMed=276 rho12=0.06 Bas97
85S362 #3390 gMed=289 rho12=0.09 Bas101
85S338 #3378 gMed=298 rho12=0.06 Bas99
85S366 #3394 gMed=305 rho12=0.03 Time0 11/7/2025 Keio_ML9_s
75S672 #3113 gMed=414 rho12=0.05 Time0 8/11/2025 Keio_ML9_s
84S287 #3351 gMed=295 rho12=0.03 Time0 10/30/2025 Keio_ML9_
26IT040 #1100 gMed=417 rho12=0.05 Time0 2−May−18 Keio_ML9_
85S377 #3399 gMed=294 rho12=0.01 Time0 11/7/2025 Keio_ML9_s
85S365 #3393 gMed=288 rho12=0.02 Time0 11/7/2025 Keio_ML9_s
85S378 #3400 gMed=207 rho12=0.01 Time0 11/7/2025 Keio_ML9_s

0.8 0.6 0.4 0.2 0.0

11/25/2025 Keio_ML9_set86 and similar samples (clustered by log−count)



1/6/2026 Keio_ML9_set87 and similar samples (clustered by log−count)



1/6/2026 and similar samples
(clustered by log−count)