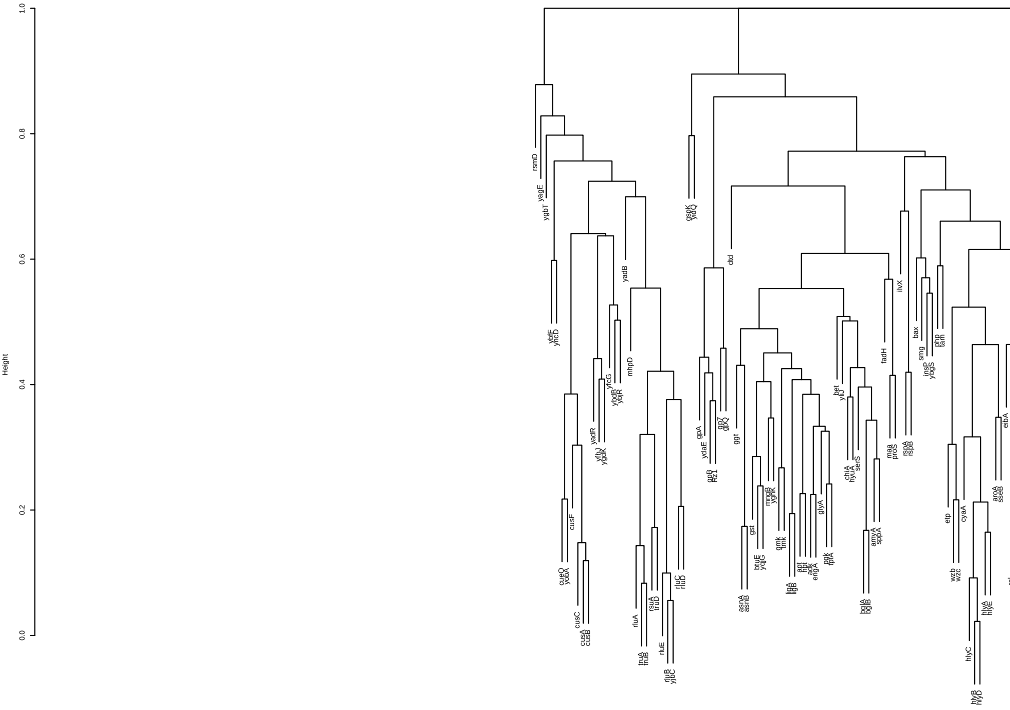

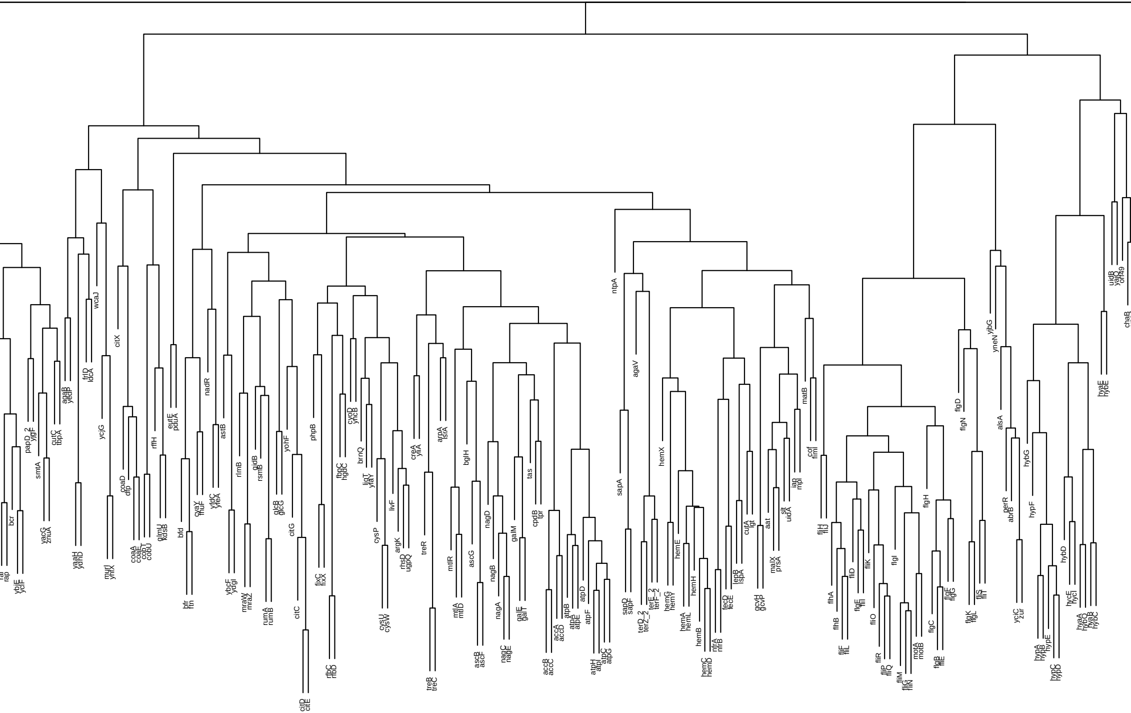
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yaaH
ydhD
frlD
ldcA
wcaJ
ycjG
murJ
yhfX
citX
coaD
dfp
coaA
coaE
cobT
cobU
rffH
glmU
kdsB
eutE
pduA
nadR
bfd
bfr
ftn
cyaY
fhuF
yfdC
yfeA
astB
ybcF
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rumB
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glcG
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fixX
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rfbC
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brnQ
ligT
yfaY
cysP
cysU
cysW
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argK
rhsD
ugpQ
creA
yliA
treR
treB
treC
arpA
lsrA
mtlR
mtlA
mtlD
bglH
ascG
ascB
ascF
nagD
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galM
galE
galT
tas
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accC
accA
accD
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atpG
ntpA
sapA
sapD
sapF
agaV
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terZ_2
terE_2
terF_2
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hemG
hemY
hemE
hemA
hemL
hemH
hemB
hemC
hemD
nfrA
nfrB
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lspA
cutA
lgt
gcvH
gcvP
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malX
prsA
slt
uidA
iap
mpl
matB
cof
fimI
fliH
fliJ
flhA
flhB
fliF
fliL
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fliR
fliP
fliQ
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fliN
motA
motB
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flgC
flgB
fliE
flgF
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flgL
fliS
fliT
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yneN
alsA
perR
abrB
yciC
zur
hybG
hypF
hypA
hypB
hypE
hypC
hypD
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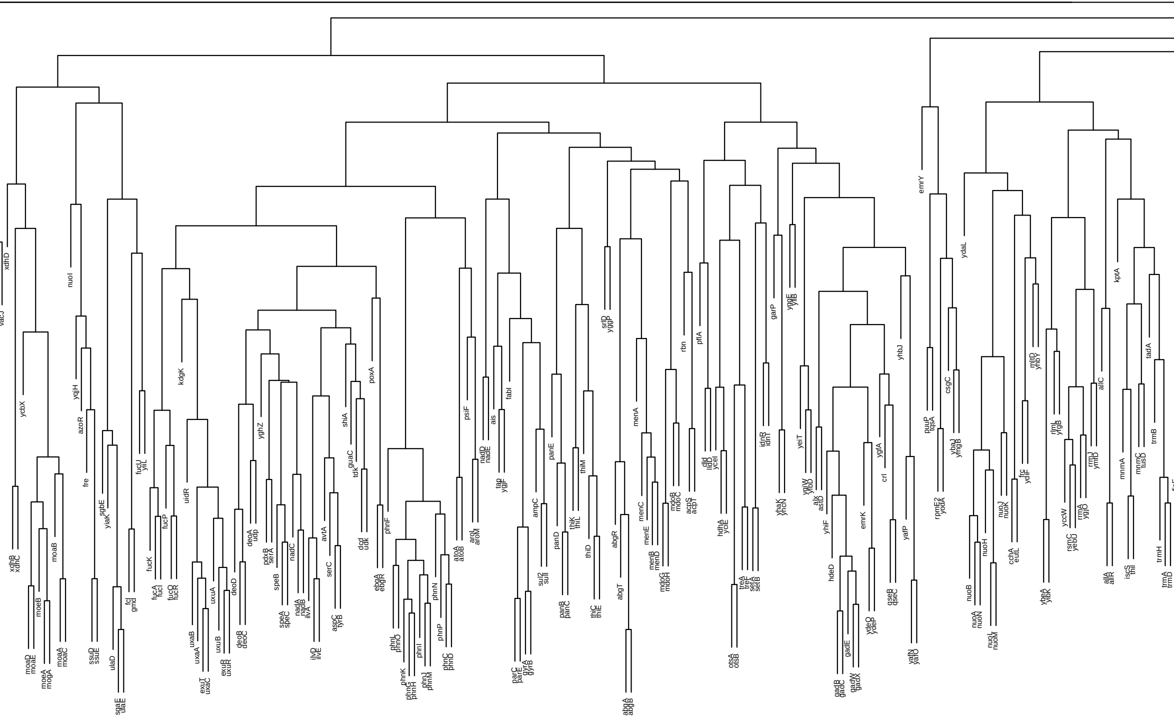
orf49
chaB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nuoI
yqjH
azoR
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ssuD
ssuE
sgbE
yiaK
ulaD
sgaE
ulaE
fucU
yiiL
fcl
gmd
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fucA
fucI
fucP
fucO
fucR
kdgK
uidR
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uxaA
exuT
uxaC
uxuA
uxuB
exuR
uxuR
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deoB
deoC
deoA
udp
yghZ
pdxB
serA
speB
speA
speC
nadC
nadA
nadB
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ilvD
ilvE
avtA
serC
aspC
tyrB
shiA
guaC
tdk
dcd
udk
poxA
phnF
ebgA
ebgR
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phnJ
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phnN
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phnC
phnD
atoA
atoB
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aroL
aroM
nadD
nadE
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tap
ygjF
fabI
parC
parE
gyrA
gyrB
ampC
sul2
sulI
panE
panD
panB
panC
thiK
thiL
thiM
thiD
thiC
thiE
srlD
yggP
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abgB
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menC
menE
menB
menD
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mdoB
mdoC
rbn
acpS
acpT
pflA
dld
lldD
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hdhA
ycIE
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otsB
treA
treF
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setB
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idnT
garP
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yhcN
yggE
yliB
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ygiW
ylbD
alx
astD
yhiF
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gadC
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gadW
gadX
emrK
ydeO
ydeP
ygfA
crl
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qseC
yhbJ
yafP
yafN
yafO
emrY
puuP
tqsA
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ybaJ
ymgB
ydaL
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nuoA
nuoN
nuoH
nuoL
nuoM
nuoJ
nuoK
cchA
eutL
frc
ydiF
mltD
yhbY
ybeA
yibK
rlmL
yfgB
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rsmC
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rrmA
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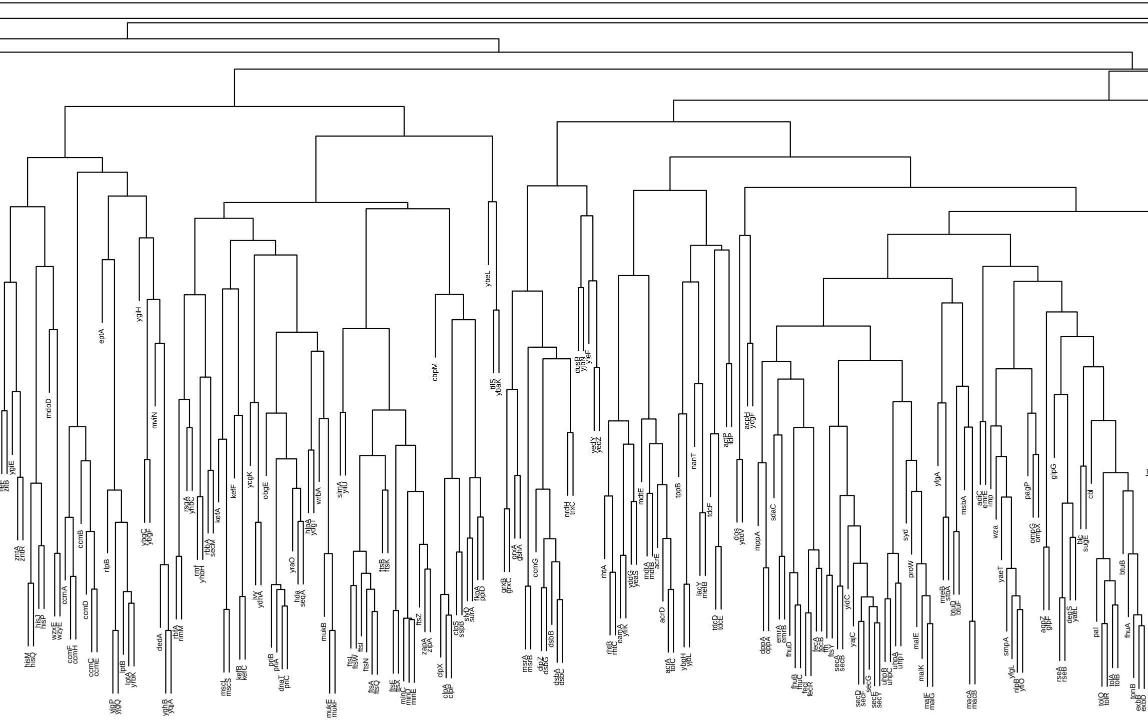

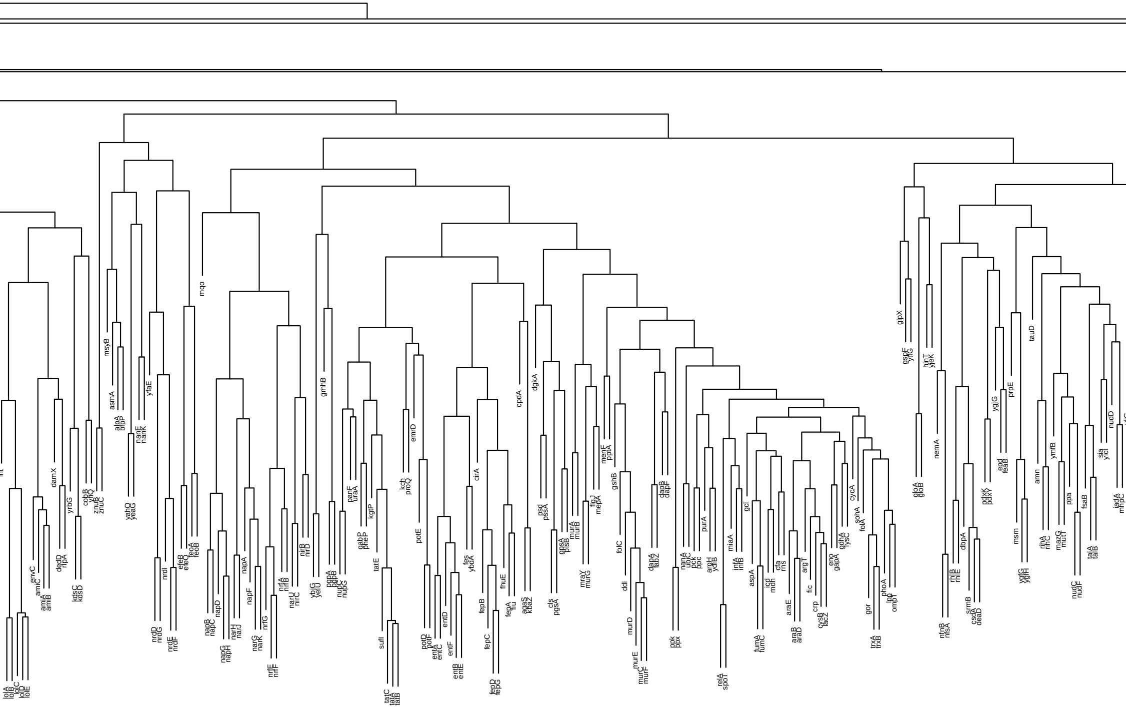
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amiB
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kdsD
cobB
yfiQ
znuB
znuC
msyB
asmA
alpA
bfpP
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yeaG
nanE
nanK
yfaE
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nrdG
nrdI
nrdE
nrdF
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efeO
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feoB
mqo
napB
napC
napD
napG
napH
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napA
napF
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narK
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nupG
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gabP
pheP
kgtP
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sufI
tatC
tatA
tatB
kch
proQ
emrD
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potD
potF
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entC
entD
entF
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entE
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fepC
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fepA
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plsB
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murB
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murC
murF
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fabZ
dapB
dapF
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ppx
nanA
ubiC
pck
ppc
purA
argH
ydiB
relA
spoT
miaA
infA
infB
gcl
aspA
fumA
fumC
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mdh
cfa
rns
araE
araB
araD
argT
fic
crp
cysB
lacZ
eno
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gdhA
lysC
cycA
sohA
folA
gor
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trxB
phoA
lpp
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glpX
gspF
ytfG
hinT
yjeK
gloA
gloB
nemA
nfnB
nfsA
rhlB
rhlE
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srmB
csdA
deaD
pdxK
pdxY
ygjG
epd
feaB
prpE
tauD
msm
ygfG
ygfH
amn
rihA
rihC
ymfB
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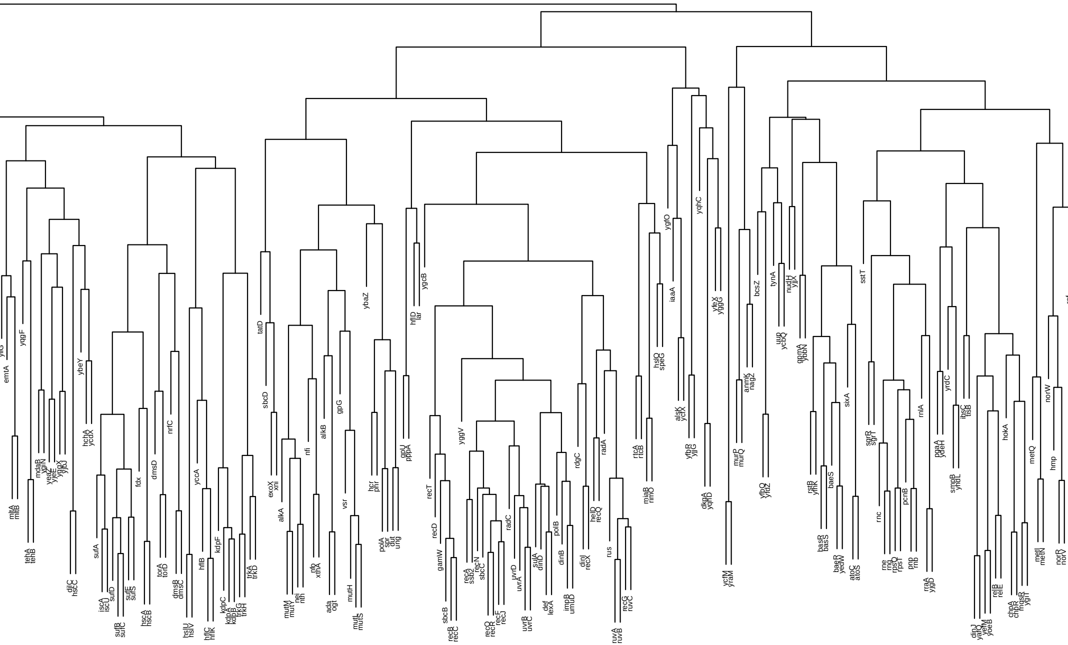
mhpC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djlC
hscC
ybeY
hchA
ycdX
sufA
iscA
iscU
sufD
sufB
sufC
sufE
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torA
torD
nrfC
dmsB
dmsC
hslU
hslV
yccA
hflB
hflC
hflK
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kdpA
kdpB
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trkH
trkA
trkD
tatD
sbcD
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xni
alkA
mutM
mutY
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vsr
mutH
mutL
mutS
ybaZ
hcr
phr
polA
spr
dut
ung
gpU
pppA
hflD
lar
ygcB
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gamW
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recC
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sbcC
recO
recR
recF
recJ
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uvrB
uvrC
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polB
dinB
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recG
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rtcB
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miaB
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yqhD
yfeX
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nudH
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rstB
yfhK
basR
basS
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baeR
yedW
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atoS
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sgrT
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yrdC
pgaA
ydeH
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ibsC
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yefM
yoeB
relB
relE
hokA
chpA
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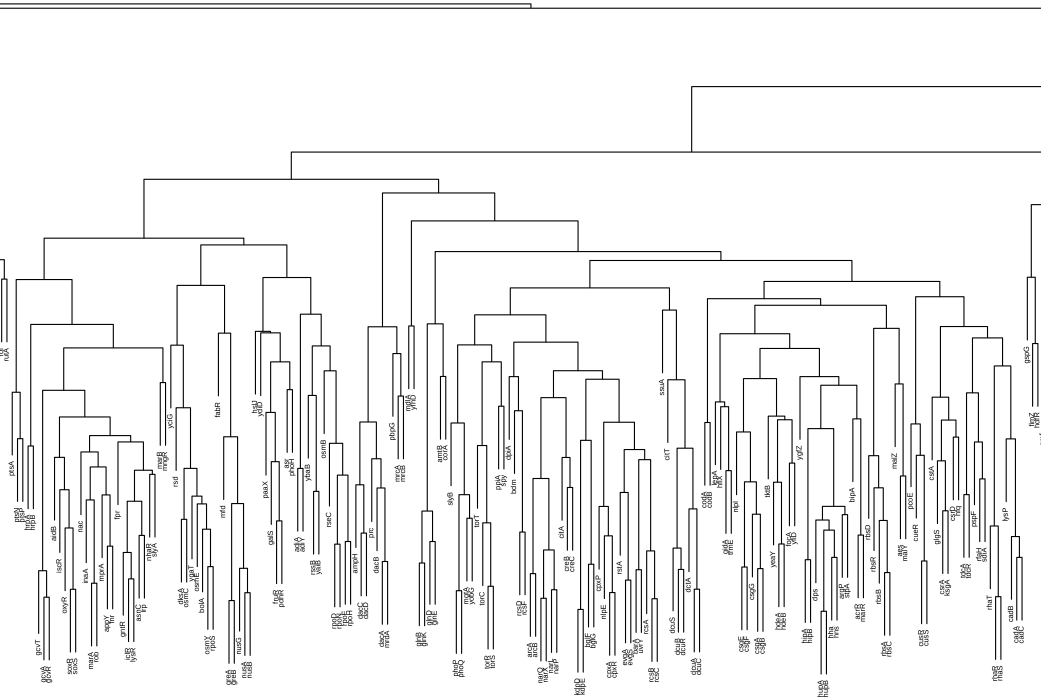
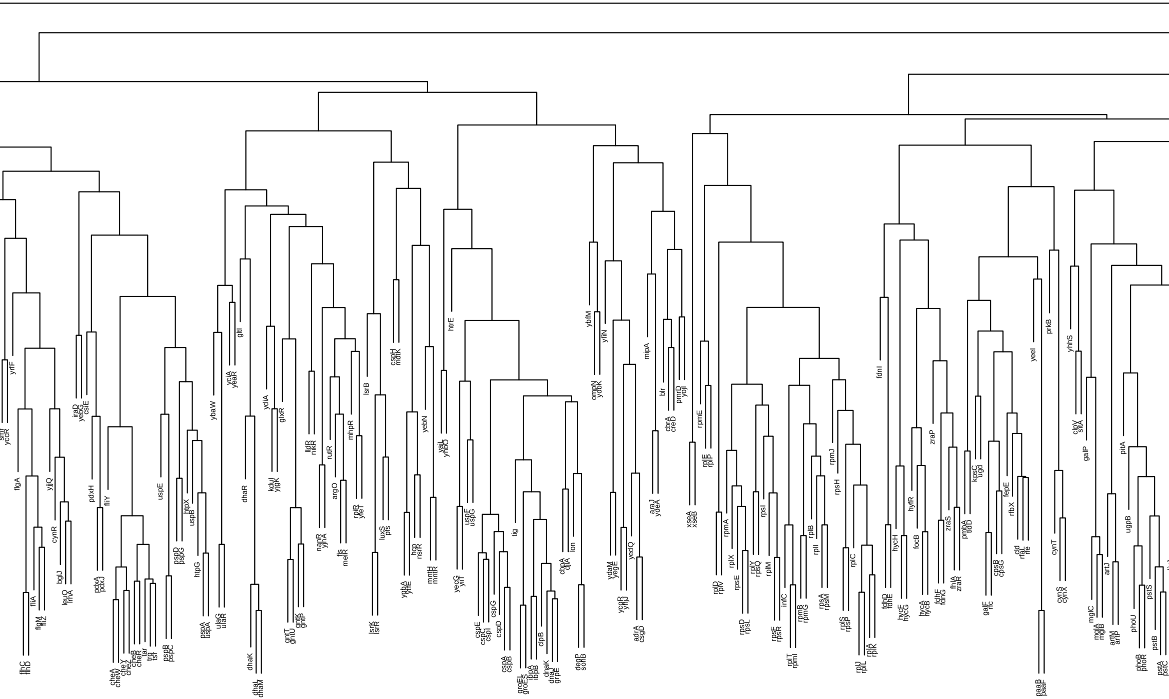
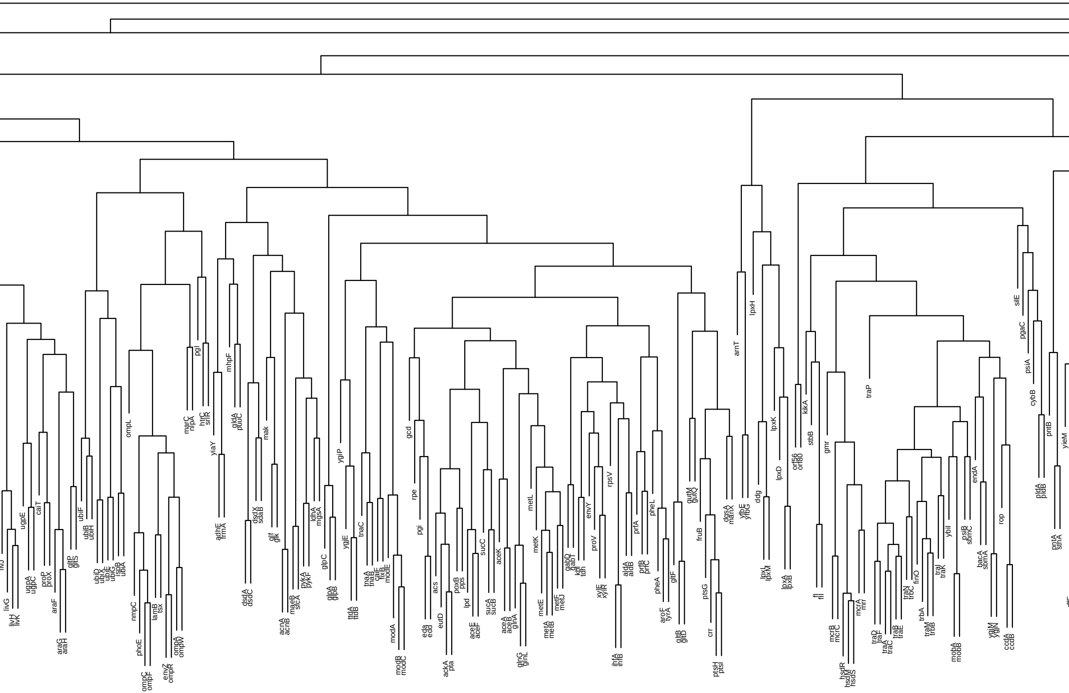
metI
metN
norW
hmp
norR
norV

E coli cluster result (Sqrt_Cosine_coefficient)



as.dist(t(a))
hclust (*, "complete")

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proX
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araH
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ubiB
ubiH
ubiD
ubiX
ubiE
ubiC
ispB
ubiA
ompL
nmpC
phoE
ompC
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lamB
tsx
envZ
ompR
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ompW
marC
nlpA
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htrC
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adhE
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modB
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metF
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gabT
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lpxB
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orf80
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hsdS
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traE
traN
trbC
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traM
trbB
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traK
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sbmA
ygjM
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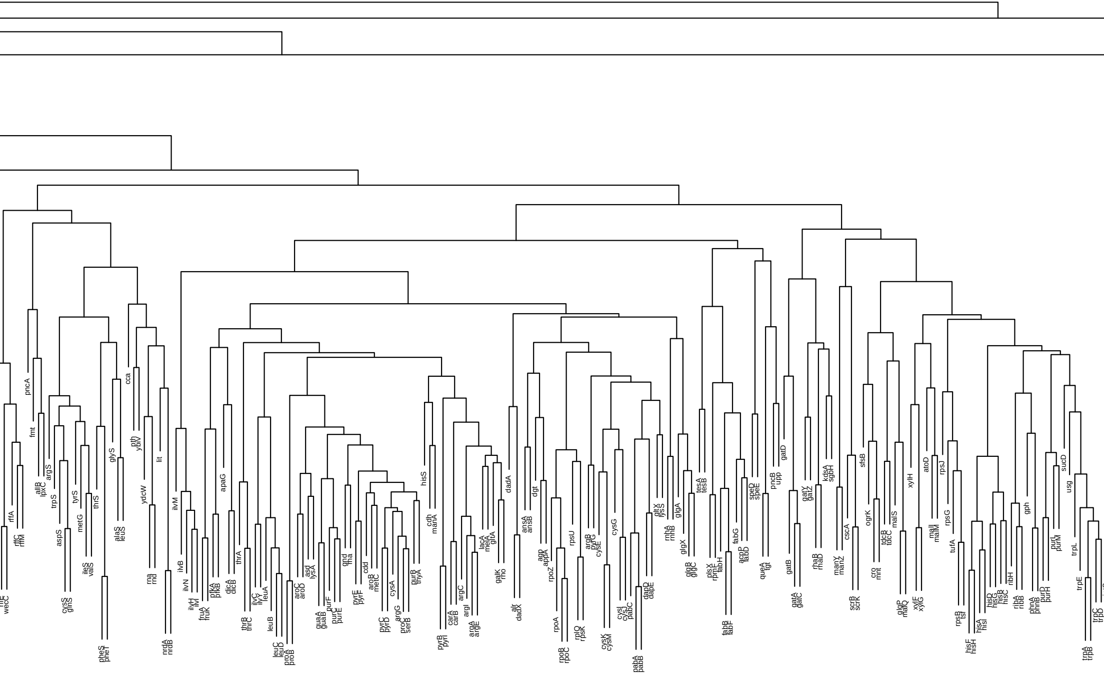
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malQ
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xylG
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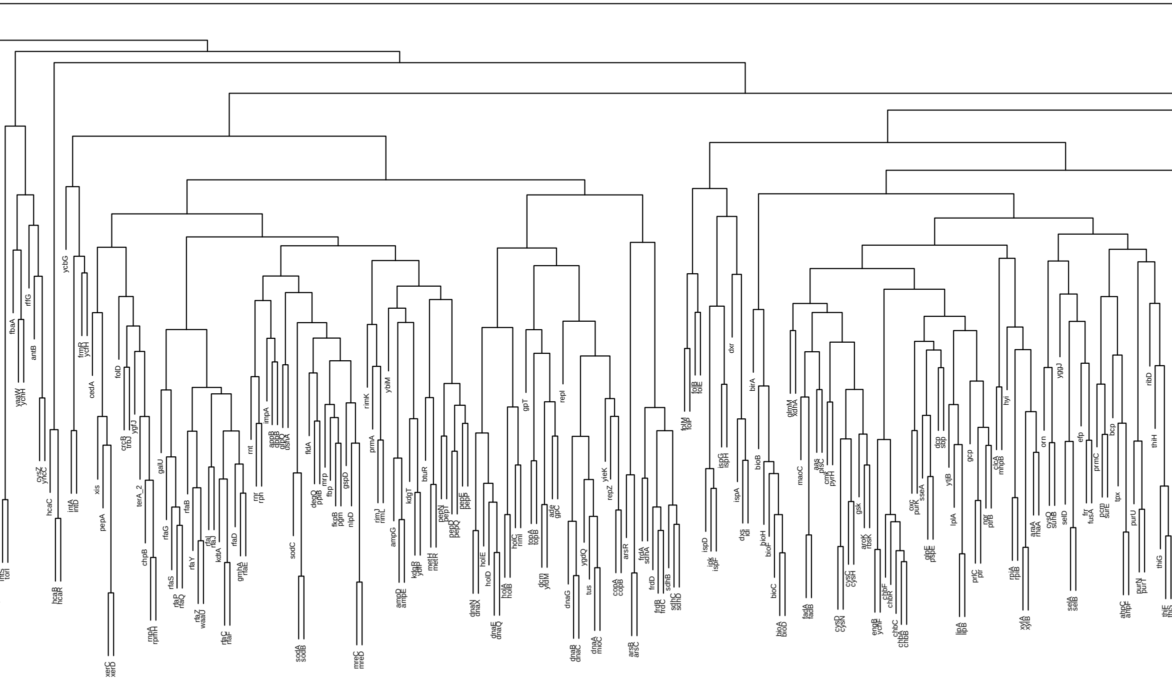
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xerC
xerD
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ygfJ
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chpB
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rpmH
galU
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rfaP
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rfaB
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rfaI
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appB
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ispH
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bioH
bioF
bioC
bioA
bioD
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fadB
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plsC
cmk
pyrH
cysD
cysN
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aroK
rbsK
engB
ychF
chbF
chbR
chbC
chbA
chbB
oxc
purK
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glpE
pspE
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lipA
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ptrB
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xylB
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orn
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yggJ
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selB
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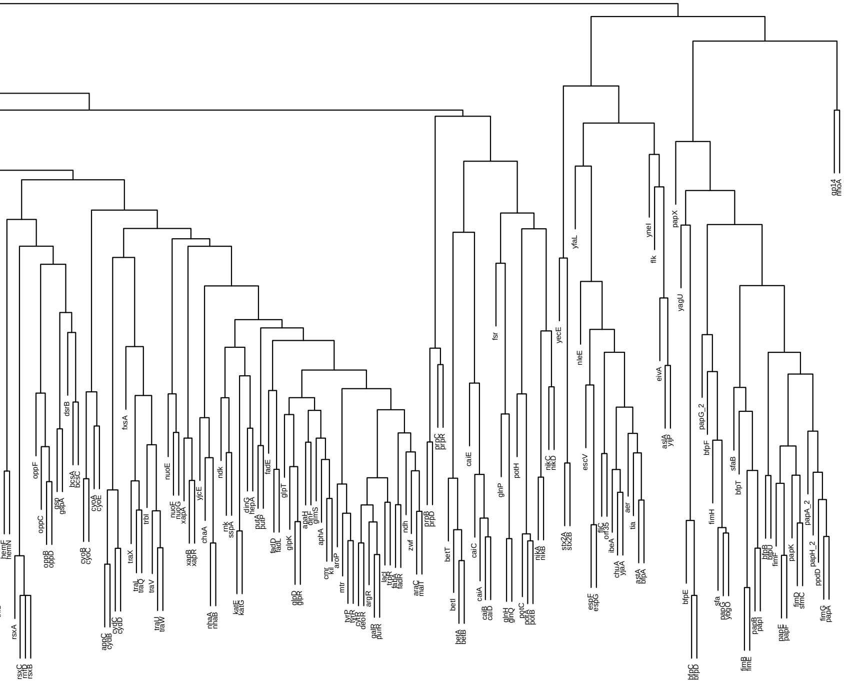
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cyoA
cyoE
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cydD
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traU
traW
nuoE
nuoF
nuoG
xapA
xapB
xapR
yjcE
chaA
nhaA
nhaB
ndk
rnk
sspA
katE
katG
dinG
hepA
putA
putP
fadE
fadD
fadL
glpT
glpK
glpD
glpR
apaH
dinF
glmS
aphA
cmr
kil
aroP
mtr
tyrP
tyrR
cytR
deoR
argR
galR
purR
lacI
trpR
fabA
fadR
ndh
zwf
araC
malT
prpB
prpD
prpC
prpR
betT
betI
betA
betB
caiE
caiC
caiA
caiB
caiD
fsr
glnP
glnH
glnQ
potH
potC
potA
potB
nikA
nikB
nikC
nikD
yecE
stx2A
stx2B
yfaL
nleE
escV
espF
espG
fliC
orf35
ibeA
chuA
yjaA
aer
tia
astA
bfpA
yneI
flk
eivA
aslA
yjjP
papX
yagU
bfpE
bfpC
bfpD
papG_2
bfpF
fimH
sfa
papG
ybgO
sfaB
bfpT
fimB
fimE
papB
papI
bfpB
bfpU
fimF
papE
papF
papK
fimD
sfmC
papA_2
papH_2
ppdD
fimG
papA
gp14
nhoA