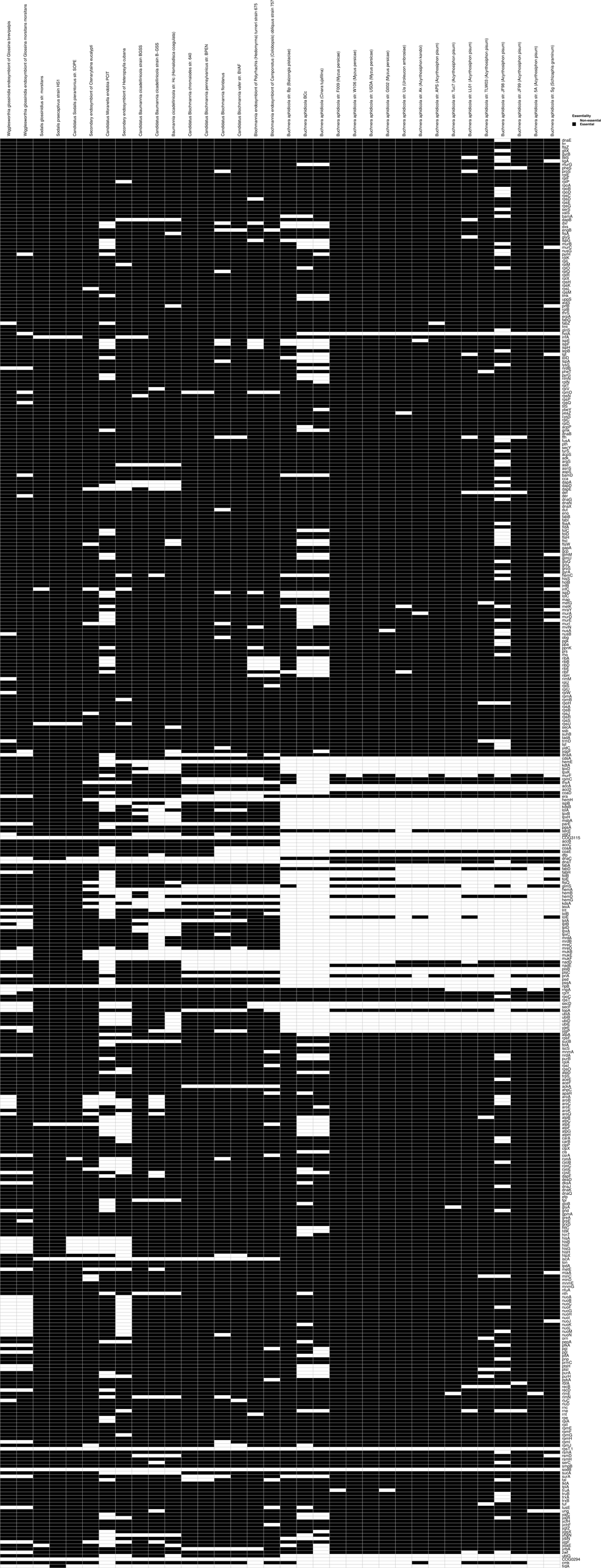
Wigglesworthia glossinidia endosymbiont of Glossina brevipalpis
Wigglesworthia glossinidia endosymbiont of Glossina morsitans morsitans
Sodalis glossinidius str. morsitans
Candidatus Sodalis pierantonius str. SOPE
Candidatus Sodalis glossinidius strain HS1
Secondary endosymbiont of Cheyrustrina eucalypti
Candidatus Moranella endobia PCIT
Secondary endosymbiont of Heteropsylla cubana
Candidatus Baumannia cicadellinicola strain BGSS
Candidatus Baumannia cicadellinicola strain B-GSS
Baumannia cicadellinicola str. Hc (Homalodisca coagulata)
Candidatus Blochmannia chromaticus str. 840
Candidatus Blochmannia pennsylvanicus str. BPEN
Candidatus Blochmannia floridanus
Candidatus Blochmannia vafer str. BVAF
Blochmannia endosymbiont of Polyrhachis (Hedomyrma) turneri strain CT5
Blochmannia endosymbiont of Camponotus (Colobopsis) obliquus strain TS7
Buchnera aphidicola str. Bp (Baizongia pistacidae)
Buchnera aphidicola BCc
Buchnera aphidicola (Cinara tujafilina)
Buchnera aphidicola str. F009 (Myzus persicae)
Buchnera aphidicola str. W106 (Myzus persicae)
Buchnera aphidicola str. USDA (Myzus persicae)
Buchnera aphidicola str. G002 (Myzus persicae)
Buchnera aphidicola str. Ua (Uroleucon ambrosiae)
Buchnera aphidicola str. Ak (Acyrthosiphon kondo)
Buchnera aphidicola str. APS (Acyrthosiphon pisum)
Buchnera aphidicola str. Tuc7 (Acyrthosiphon pisum)
Buchnera aphidicola str. LL01 (Acyrthosiphon pisum)
Buchnera aphidicola str. TLW03 (Acyrthosiphon pisum)
Buchnera aphidicola str. JF98 (Acyrthosiphon pisum)
Buchnera aphidicola str. JF99 (Acyrthosiphon pisum)
Buchnera aphidicola str. 5A (Acyrthosiphon pisum)
Buchnera aphidicola str. Sg (Schizaphis graminum)
Essentiality
Non-essential
Essential
dnaE
ftsI
ftsZ
gltX
ftsW
lpxC
kgA
rluG
phoB
proS
rplB
rplP
rpoA
rpoB
rpoC
rpsD
rpsE
rpsG
rpsS
secE
serS
tatA
tkt
dxr
fmt
mraW
pyrG
rplQ
murB
murC
murD
ftsQ
rplK
rplB
rplM
rplN
rplR
rplX
rpsH
rpsK
rpsL
rpsM
ftsA
ftsZ
rplS
rplT
rplU
rplV
rplW
rplC
rplD
rplE
rplF
rplA
rplJ
rplL
rpmA
rpmB
dnaB
fth
fusA
glt
lepA
lepB
prfA
prfB
rho
rpsA
smpB
tsf
tuf
ftsY
leuS
pgsA
rnc
ffh
lysA
ftsK
mqo
mrdA
mrdB
mraZ
mraY
murE
murF
mraR
murG
murC
ftsQ
ftsA
ftsZ
mraW
ftsI
murE
murF
mraY
murD
murG
murC
nusB
ftsW
dcd
pgk
gpsA
pgpB
cmk
rnz
rbfA
rbfB
rbgA
tsaE
rsmI
rsmH
mnmA
rplL
rplJ
rplM
rpmA
rpmB
rpsA
rpsB
rpsJ
rpsK
rpsM
rpsQ
secA
ssb
nusA
trmD
trmE
yrdC
ftsH
hflB
ftsH
gcvP
gcvT
gcvH
hemC
hemD
hemB
hemL
ftsE
ftsX
murA
murB
murC
murD
murE
murF
murG
murI
mraY
mraW
ftsZ
ftsA
ftsQ
ftsW
ftsI
murE
murF
murG
murC
murD
ftsK
mqo
ftsY
ftsE
ftsX
hemE
hcaA
lpxD
lpxA
murI
murB
murC
murD
murE
murF
murG
murA
accD
coaD
ftsH
hemH
lspB
lgt
lpxB
lpxH
mtaA
parE
gltX
ftsY
BDCI3115
accB
accC
coaE
dtp
dnaC
dnaX
lspA
lgt
lpxB
lpxH
lpxC
lpxA
lpxD
fabA
fabB
fabD
fabG
fabI
fabZ
fabF
hemA
hemB
hemD
hemG
hemC
lexA
ftsA
ftsB
ftsE
ftsX
lpxB
lpxD
lpxA
lpxC
rhlB
rnpA
rnc
mreC
mreD
mukB
mukE
mukF
nadD
pstB
pstA
pstC
pwd
dapA
rplB
rplP
rpmC
rpsC
dkt
secD
secF
gpsA
ubiB
ubiD
ubiE
ybiT
ftsA
ftsZ
gyrB
lexA
recA
murB
murD
rpsA
rbsK
dapD
rsgA
acpS
acpP
aroA
aroH
aroC
aroB
aroE
aroD
aroQ
atpB
atpE
atpF
atpC
atpD
atpG
atpA
atpH
cafA
cdsA
cls
dnaA
cysS
cysG
cysE
cysK
dapB
dxuA
dnaJ
dnaK
dnaG
rpe
gcvB
gyrA
gcvP
gcvA
ftsZ
ftsK
hflC
hflK
hscA
hscB
hscC
hslU
hslV
hupA
lacA
lpxI
mreB
mraA
mraZ
mnmD
mnmE
mnmG
nth
nuoA
nuoB
nuoC
nuoD
nuoE
nuoF
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nuoJ
nuoK
nuoL
nuoM
nuoN
pnp
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pfkA
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ppiA
ppiB
prfC
ptsH
ptsI
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purB
pyrA
rdgA
recG
recD
rimM
rluD
nuoD
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rsmH
serC
secB
suhB
suvA
surA
tal
talA
tktA
trxA
trxB
tuaE
uvrB
uvrC
vgrG
vgrR
vgrX
VBIN
VBIN
VBIE
VBIE
VBIF
zwf
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sdhB
sdhC
sdhD
sdhE
sdhF
sdhG
sdhH
sdhI