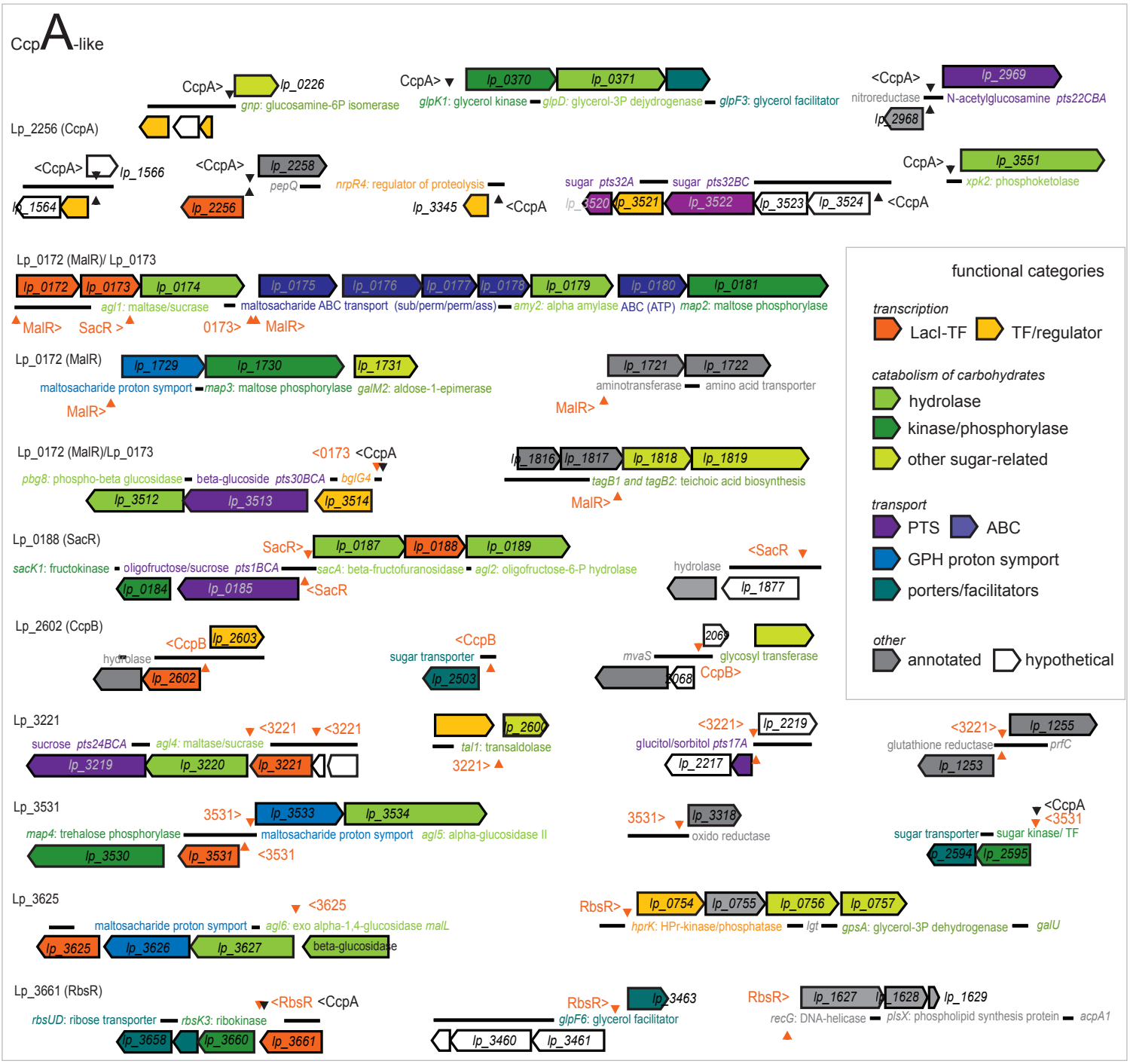
CcpA-like
Lp_2256 (CcpA)
CcpA>
lp_0226
gnp: glucosamine-6P isomerase
lp_0370
lp_0371
glpK1: glycerol kinase
glpD: glycerol-3P dejydrogenase
glpF3: glycerol facilitator
<CcpA>
lp_2969
nitroreductase
N-acetylglucosamine
pts22CBA
lp_2968
lp_1566
lp_1564
lp_2258
pepQ
nrpR4: regulator of proteolysis
lp_2256
lp_3345
sugar pts32A
sugar pts32BC
lp_3521
lp_3522
lp_3523
lp_3524
lp_3551
xpk2: phosphoketolase
Lp_0172 (MalR)/ Lp_0173
lp_0172
lp_0173
lp_0174
lp_0175
lp_0176
lp_0177
lp_0178
lp_0179
lp_0180
lp_0181
agl1: maltase/sucrase
maltosacharide ABC transport (sub/perm/perm/ass)
amy2: alpha amylase
ABC (ATP)
map2: maltose phosphorylase
MalR>
SacR >
0173>
MalR>
Lp_0172 (MalR)
lp_1729
lp_1730
lp_1731
maltosacharide proton symport
map3: maltose phosphorylase
galM2: aldose-1-epimerase
MalR>
lp_1721
lp_1722
aminotransferase
amino acid transporter
MalR>
Lp_0172 (MalR)/Lp_0173
<0173
<CcpA
pbg8: phospho-beta glucosidase
beta-glucoside
pts30BCA
bglG4
lp_3512
lp_3513
lp_3514
lp_1816
lp_1817
lp_1818
lp_1819
tagB1 and tagB2: teichoic acid biosynthesis
MalR>
Lp_0188 (SacR)
SacR>
lp_0187
lp_0188
lp_0189
sacK1: fructokinase
oligofructose/sucrose
pts1BCA
sacA: beta-fructofuranosidase
agl2: oligofructose-6-P hydrolase
lp_0184
lp_0185
<SacR
hydrolase
<SacR
lp_1877
Lp_2602 (CcpB)
<CcpB
lp_2603
hydrolase
lp_2602
<CcpB
sugar transporter
lp_2503
mvaS
glycosyl transferase
CcpB>
functional categories
transcription
LacI-TF
TF/regulator
catabolism of carbohydrates
hydrolase
kinase/phosphorylase
other sugar-related
transport
PTS
ABC
GPH proton symport
porters/facilitators
other
annotated
hypothetical
Lp_3221
<3221
<3221
sucrose
pts24BCA
agl4: maltase/sucrose
lp_3219
lp_3220
lp_3221
tal1: transaldolase
3221>
<3221>
lp_2219
glucitol/sorbitol
pts17A
lp_2217
<3221>
lp_1255
glutathione reductase
prfC
lp_1253
Lp_3531
3531>
lp_3533
lp_3534
map4: trehalose phosphorylase
maltosacharide proton symport
agl5: alpha-glucosidase II
lp_3530
lp_3531
<3531
3531>
lp_3318
oxido reductase
<CcpA
<3531
sugar transporter
sugar kinase/ TF
lp_2594
lp_2595
Lp_3625
<3625
maltosacharide proton symport
agl6: exo alpha-1,4-glucosidase
malL
lp_3625
lp_3626
lp_3627
beta-glucosidase
RbsR>
lp_0754
lp_0755
lp_0756
lp_0757
hprK: HPr-kinase/phosphatase
lgt
gpsA: glycerol-3P dehydrogenase
galU
Lp_3661 (RbsR)
<RbsR
<CcpA
rbsUD: ribose transporter
rbsK3: ribokinase
lp_3658
lp_3660
lp_3661
RbsR>
lp_3463
glpF6: glycerol facilitator
lp_3460
lp_3461
RbsR>
lp_1627
lp_1628
lp_1629
recG: DNA-helicase
plsX: phospholipid synthesis protein
acpA1
EBgR-like
Lp_3470 (LacR)
protein kinase
brnQ3
lp_3464
lacS: lactose/ proton symporter
lacA: beta galactosidase
lp_3468
lp_3469
<LacR>
lp_3470
ram1: alpha rhamnosidase
lp_3471
Lp_3479 (GalR)
lp_3476
rhamnoside transporter
ram2: alpha rhamnosidase
rhamnoside transporter
lp_3472
lp_3473
lp_3474
fic
galT: UTP-hexose1P uridylyltransferase
galE4: UDP-glucose 4 epimerase
galK: galactokinase
lacL and lacM: beta galactosidase
lp_3479
lp_3480
lp_3481
lp_3482
<RafR
<GalR
lp_3483
lp_3484
Lp_3488 (RafR)
<RafR
melA: melibiase
rafP: raffinose/melibiose/galactose proton symporter
galM3: aldose 1 epimerase
lp_3485
lp_3486
lp_3487
lp_3488
<GalR
gcsH2
rodA2
lp_2354
<GalR
lp_3321