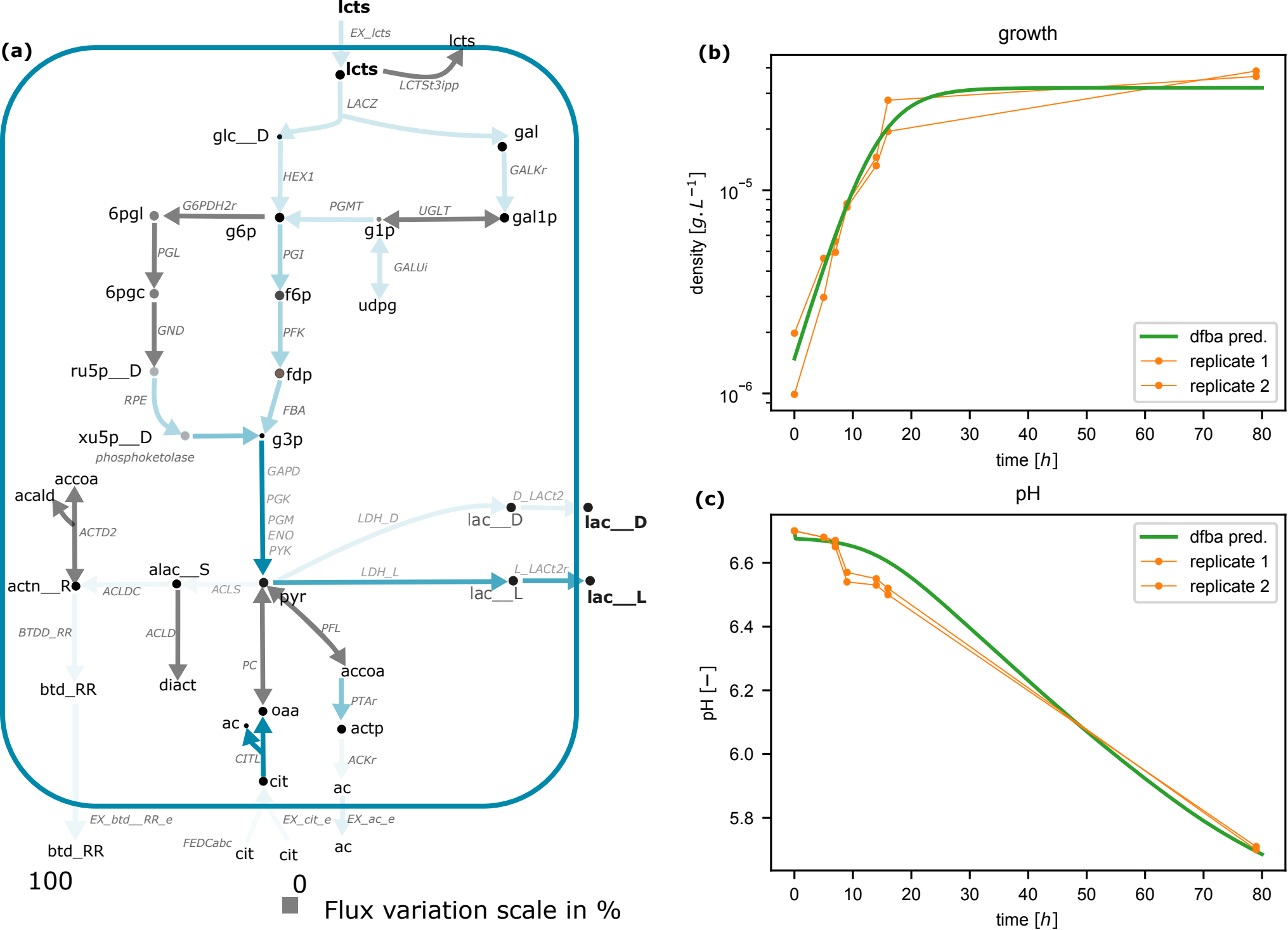
(a)
lcts
EX_lcts
lcts
lcts
LCTSt3ipp
LACZ
glc__D
gal
HEX1
GALKr
6pgl
G6PDH2r
g6p
PGMT
g1p
UGLT
gal1p
PGL
PGI
GALUi
6pgc
f6p
udpg
GND
PFK
ru5p__D
fdp
RPE
FBA
xu5p__D
g3p
phosphoketolase
GAPD
accoa
acald
PGK
D_LACt2
PGM
ENO
PYK
LDH_D
lac__D
lac__D
ACTD2
alac__S
LDH_L
L_LACt2r
actn__R
ACLDC
ACLS
pyr
lac__L
lac__L
BTDD_RR
ACLD
PFL
PC
accoa
btd_RR
diact
PTAr
oaa
ac
actp
CITL
ACKr
cit
ac
EX_btd__RR_e
EX_cit_e
EX_ac_e
FEDCabc
btd_RR
cit
cit
ac
100
0
Flux variation scale in %
(b)
growth
density [g.L⁻¹]
time [h]
dfba pred.
replicate 1
replicate 2
(c)
pH
pH [−]
time [h]
dfba pred.
replicate 1
replicate 2