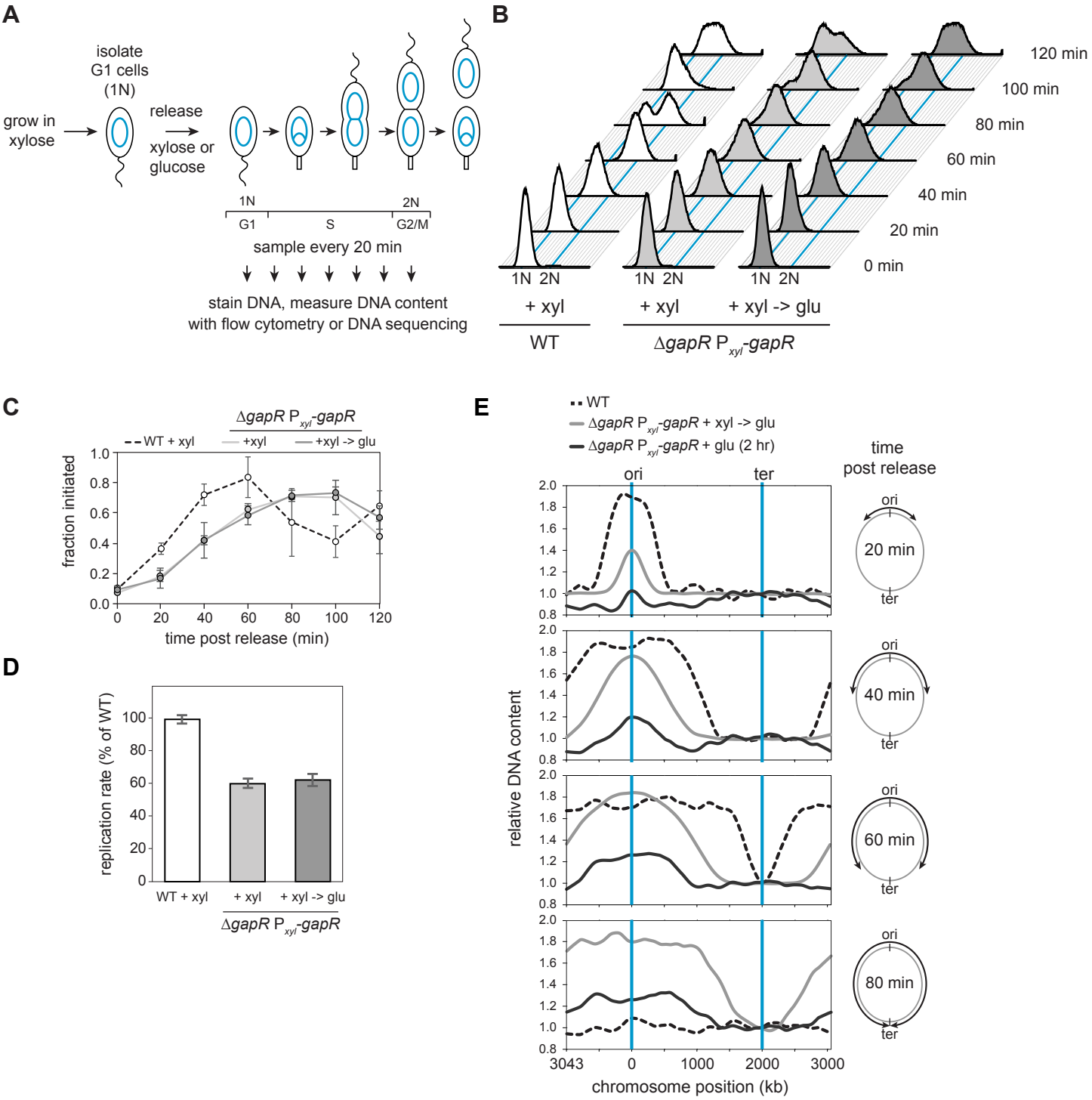
Figure S3


A
isolate
G1 cells
(1N)
grow in
xylose
release
xylose or
glucose
1N
2N
G1
S
G2/M
sample every 20 min
stain DNA, measure DNA content
with flow cytometry or DNA sequencing
B
120 min
100 min
80 min
60 min
40 min
20 min
0 min
1N 2N
+ xyl
+ xyl
+ xyl -> glu
WT
ΔgapR Pxyl-gapR
C
ΔgapR Pxyl-gapR
WT + xyl
+xyl
+xyl -> glu
fraction initiated
time post release (min)
D
replication rate (% of WT)
WT + xyl
+ xyl
+ xyl -> glu
ΔgapR Pxyl-gapR
E
WT
ΔgapR Pxyl-gapR + xyl -> glu
ΔgapR Pxyl-gapR + glu (2 hr)
time
post release
ori
ter
20 min
40 min
60 min
80 min
relative DNA content
chromosome position (kb)