Fig. 1a


pGS158
8393bp
SV40 polyA
bsd
UbC Promoter
CAG promoter
SV40 intron
T-Antigen
SV40 polyA
puc ori
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
4800
5200
5600
6000
6400
6800
7200
7600

Fig. 1b

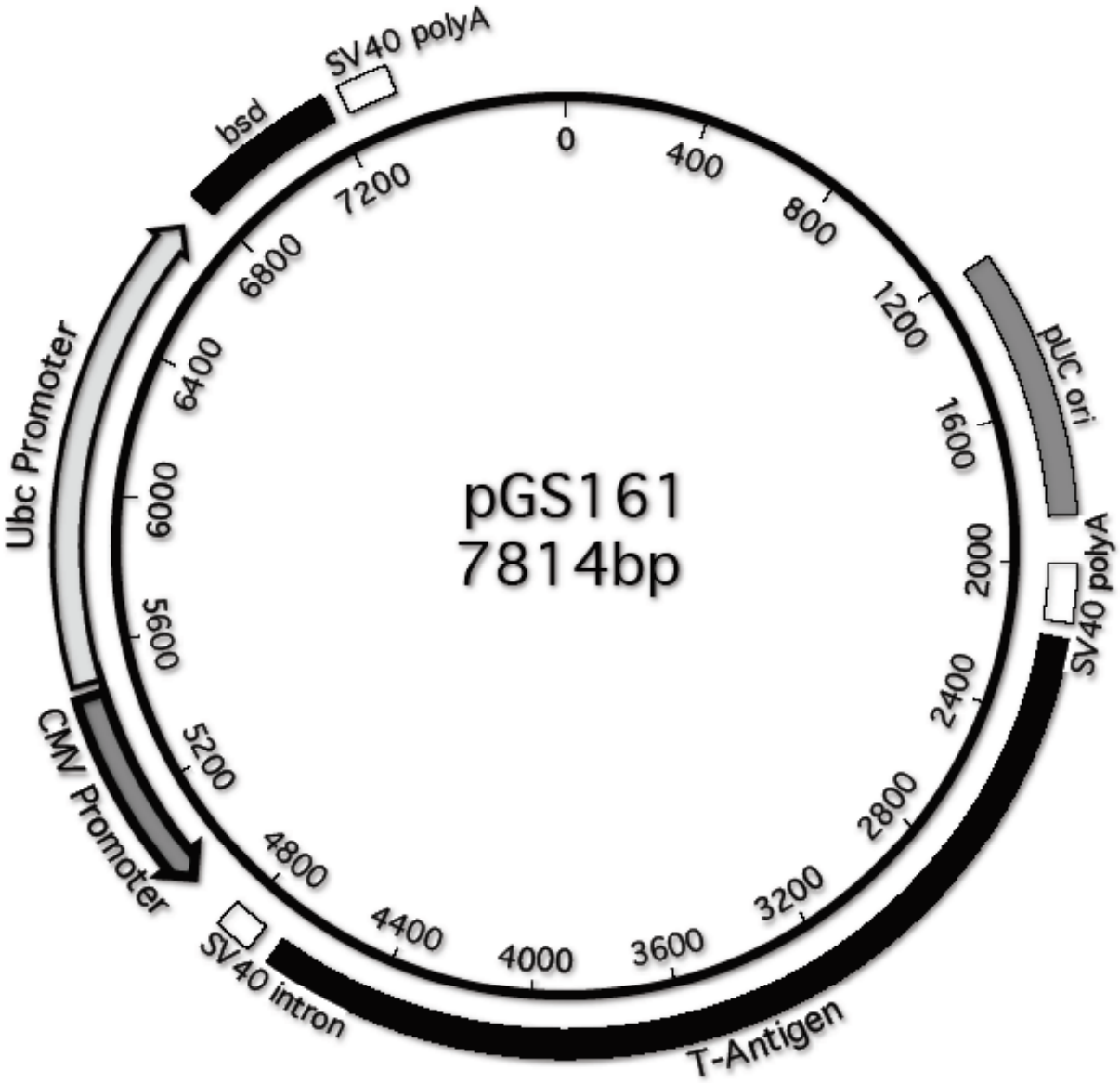

pGS161
7814bp
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
4800
5200
5600
6000
6400
6800
7200
SV40 polyA
bsd
Ubc Promoter
CMV Promoter
SV40 intron
T-Antigen
pUC ori
SV40 polyA

Fig. 1c

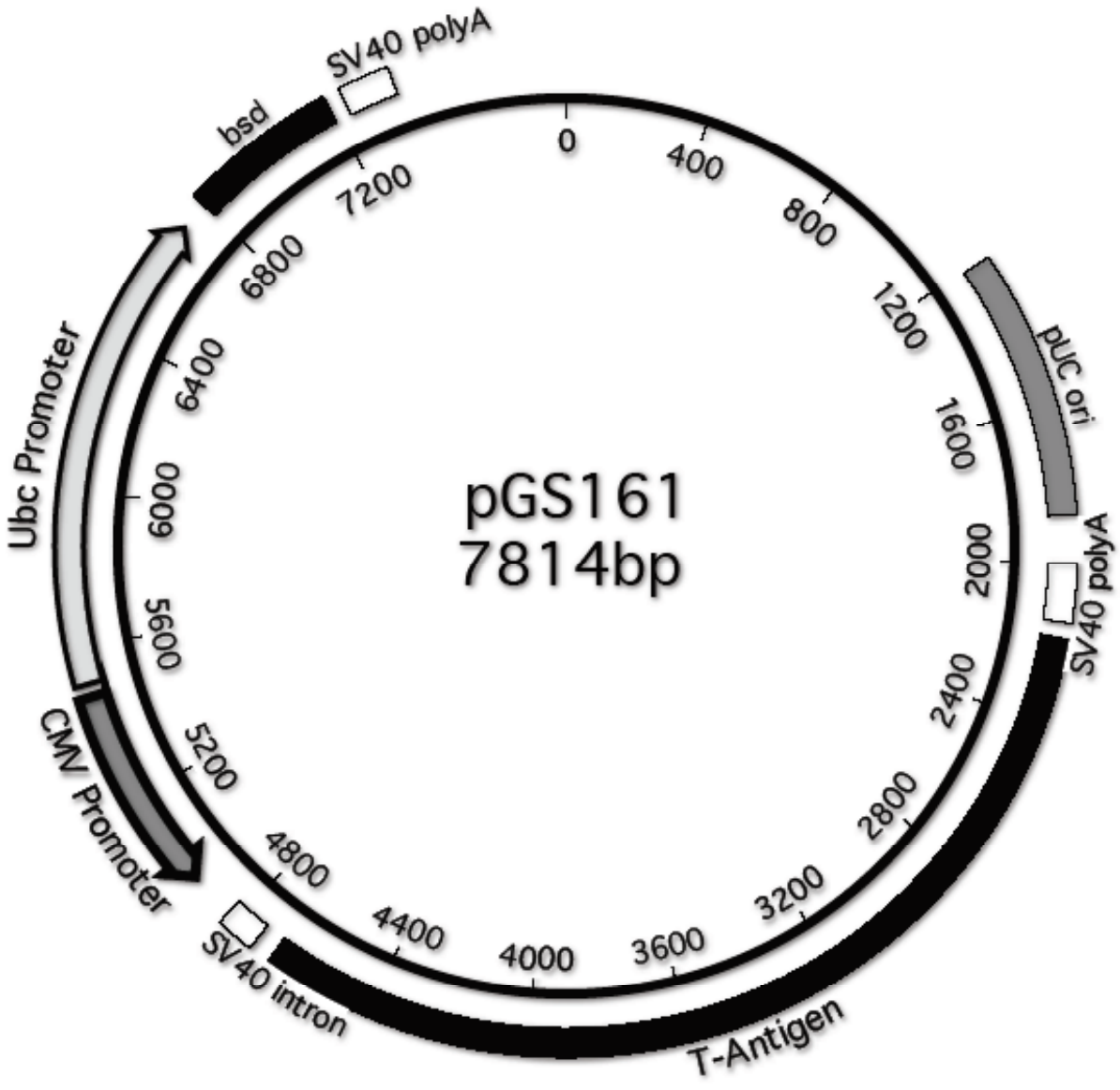

pGS161
7814bp
SV40 polyA
bsd
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
4800
5200
5600
6000
6400
6800
7200
pUC ori
SV40 polyA
T-Antigen
SV40 intron
CMV Promoter
Ubc Promoter

Fig. 2a

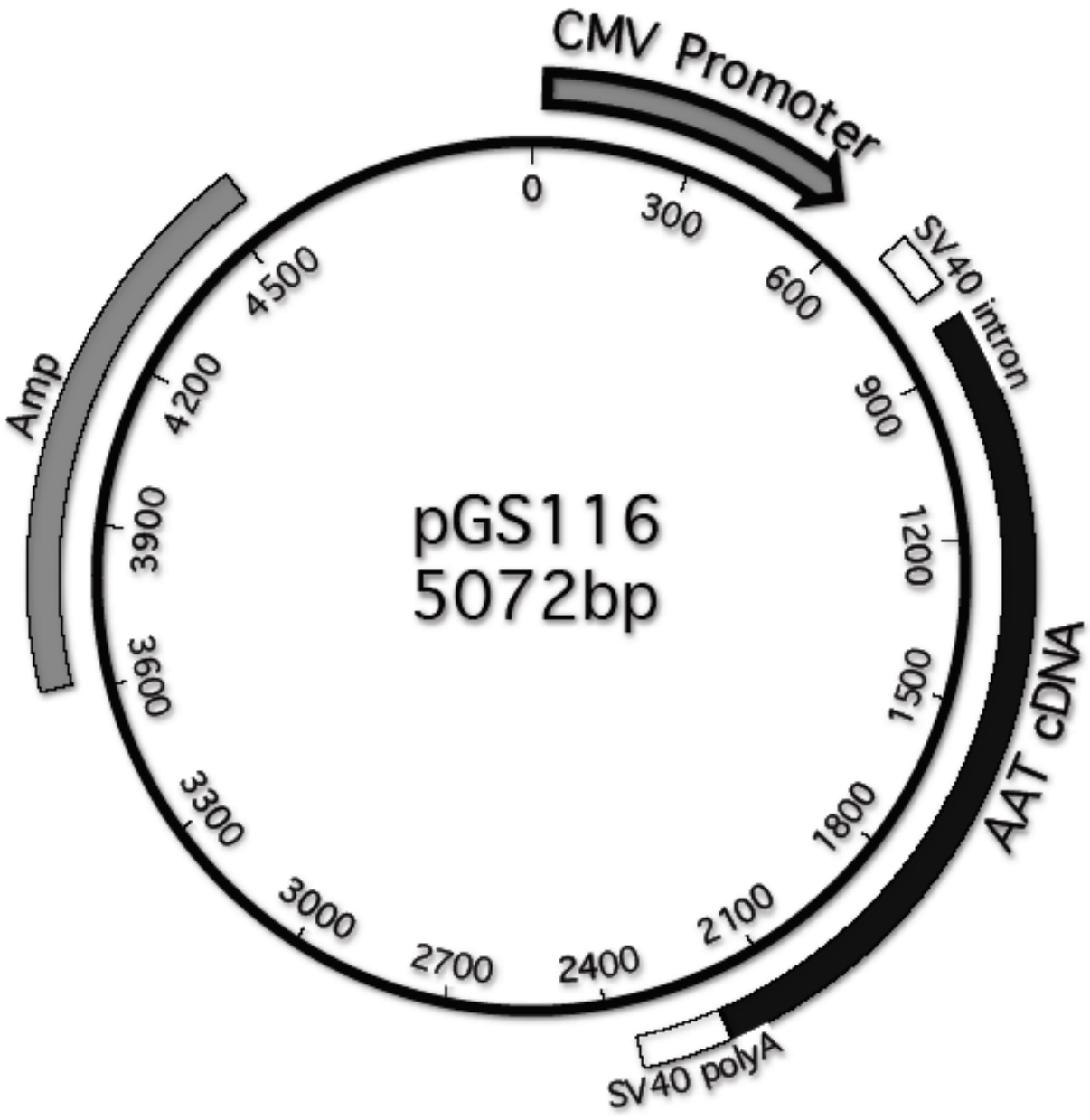

CMV Promoter
SV40 intron
AAT cDNA
SV40 polyA
Amp
pGS116
5072bp
0
300
600
900
1200
1500
1800
2100
2400
2700
3000
3300
3600
3900
4200
4500

Fig. 2b

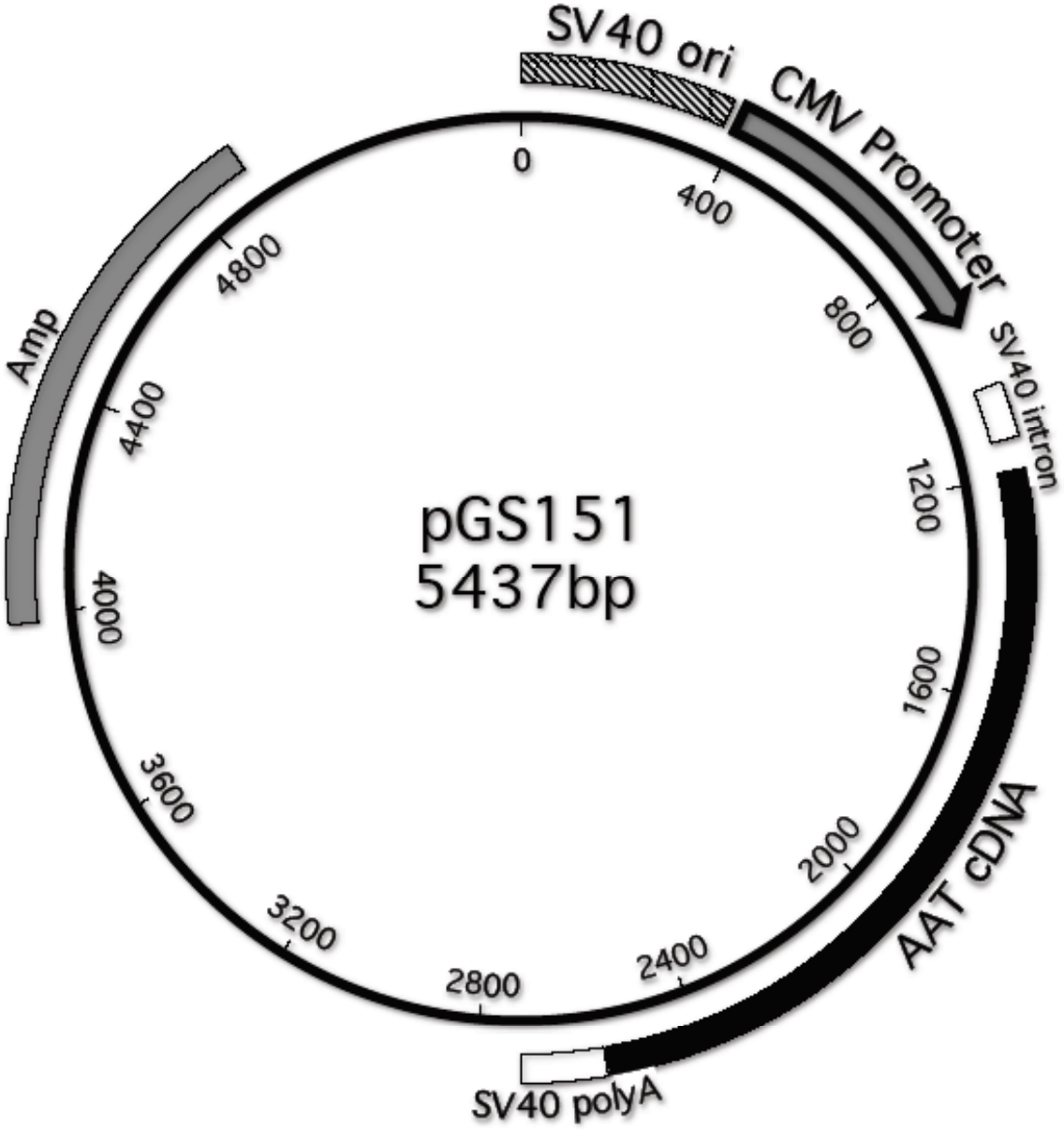

SV40 ori
CMV Promoter
SV40 intron
AAT cDNA
SV40 polyA
Amp
pGS151
5437bp
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
4800

Fig. 2c

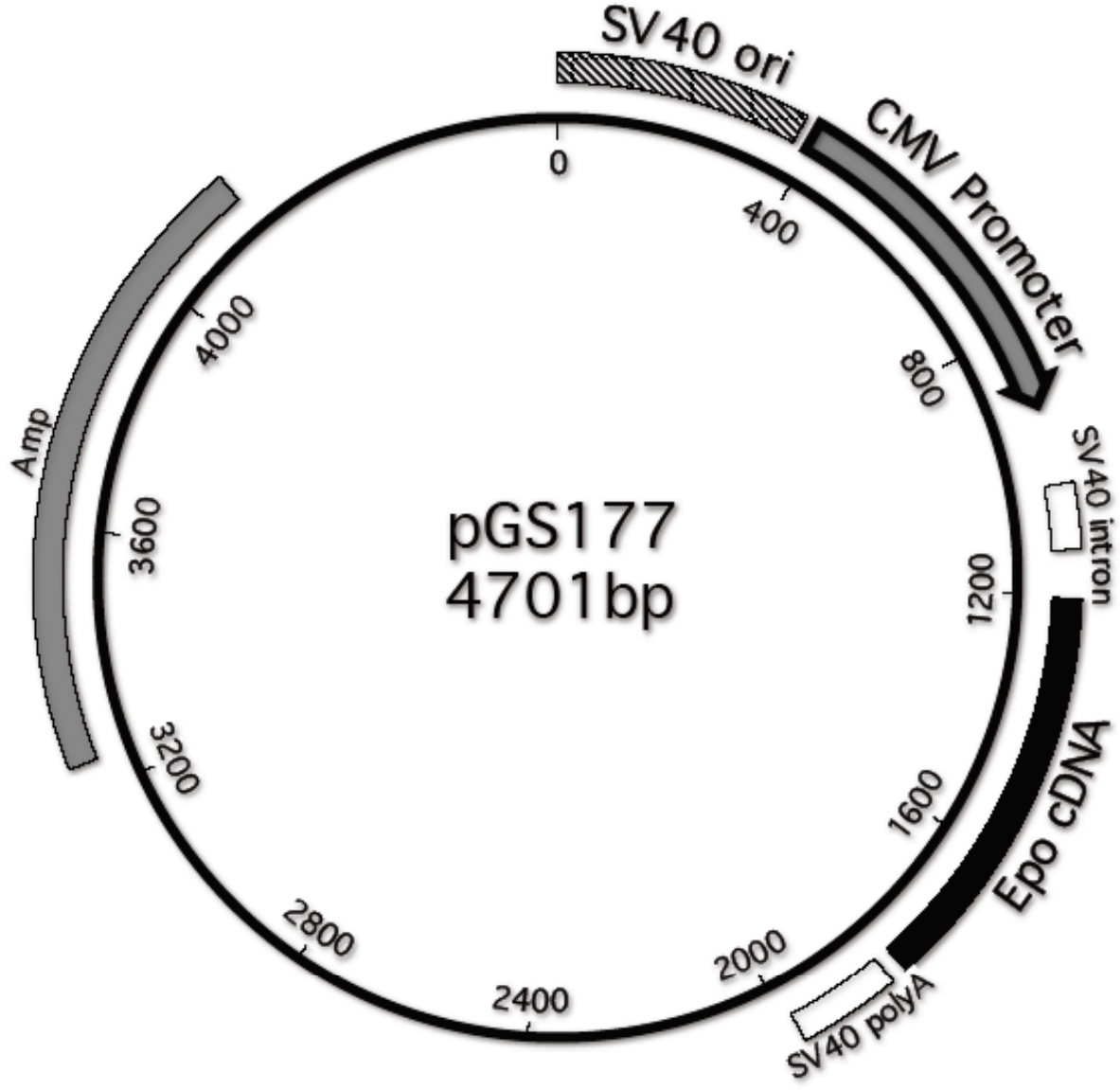

SV40 ori
CMV Promoter
SV40 intron
Epo cDNA
SV40 polyA
Amp
pGS177
4701bp
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000

Fig. 3

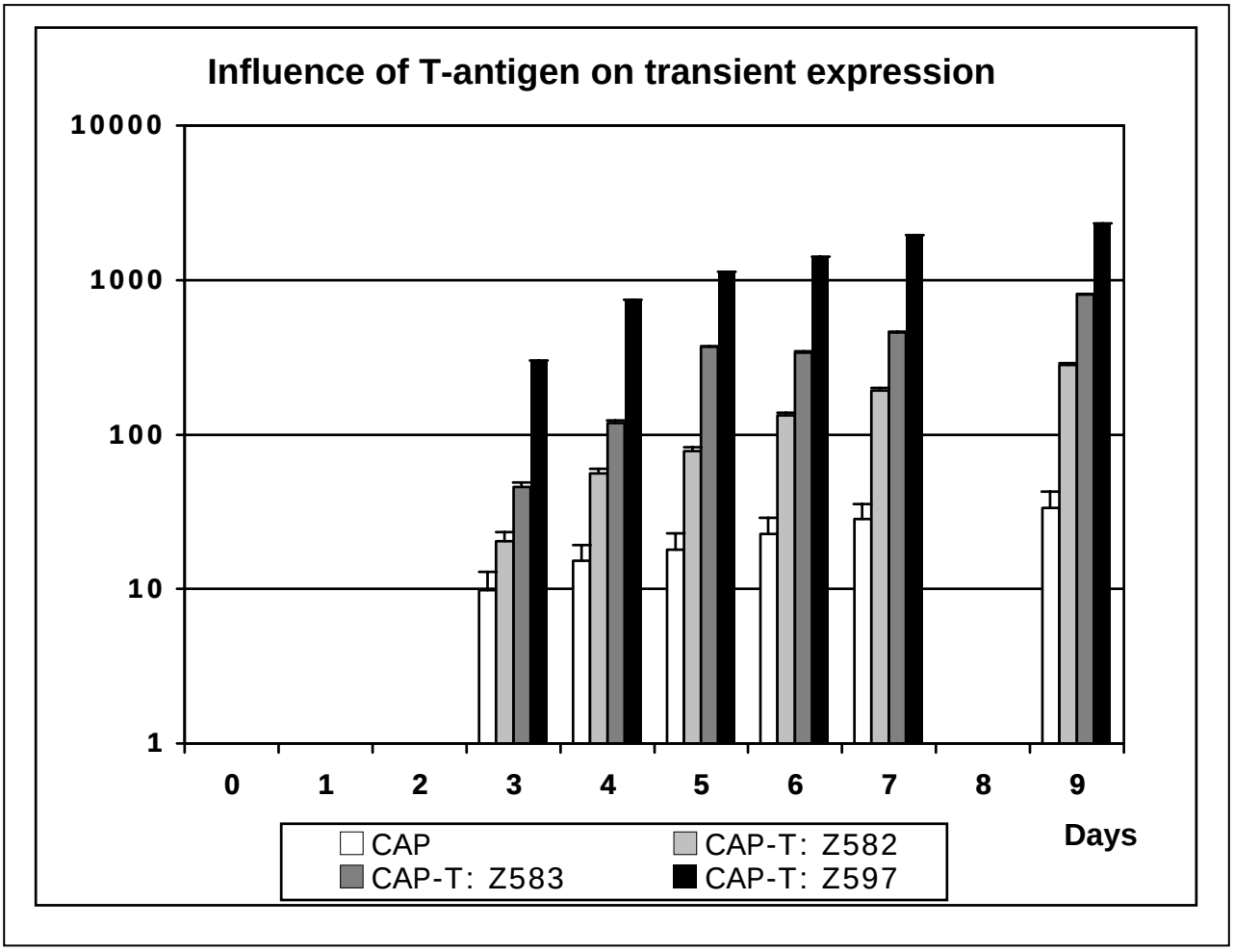

Influence of T-antigen on transient expression
10000
1000
100
10
1
0
1
2
3
4
5
6
7
8
9
Days
CAP
CAP-T: Z582
CAP-T: Z583
CAP-T: Z597

Fig. 4

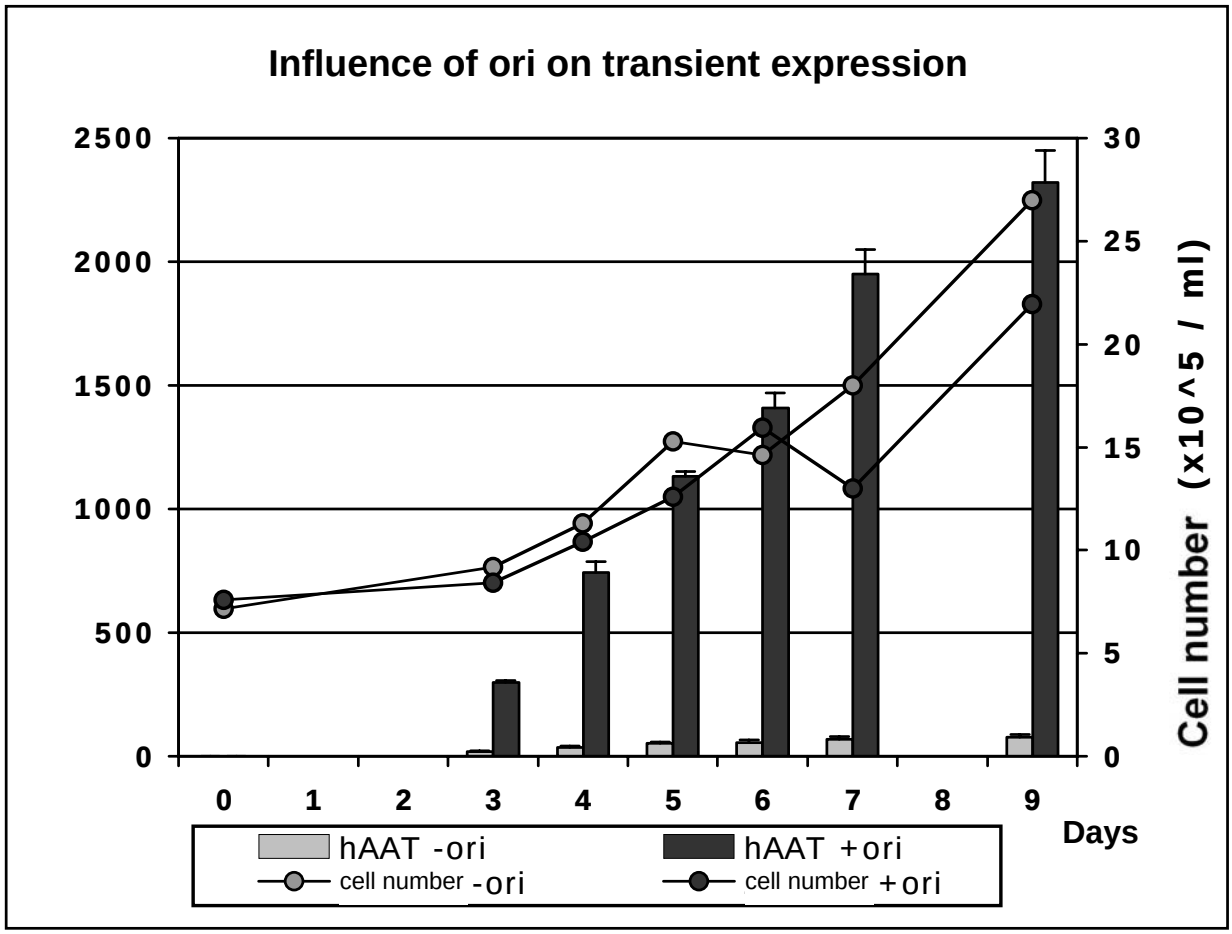

Influence of ori on transient expression
2500
2000
1500
1000
500
0
30
25
20
15
10
5
0
Cell number (x10^5 / ml)
0 1 2 3 4 5 6 7 8 9
Days
hAAT -ori
hAAT +ori
cell number -ori
cell number +ori

Fig. 5

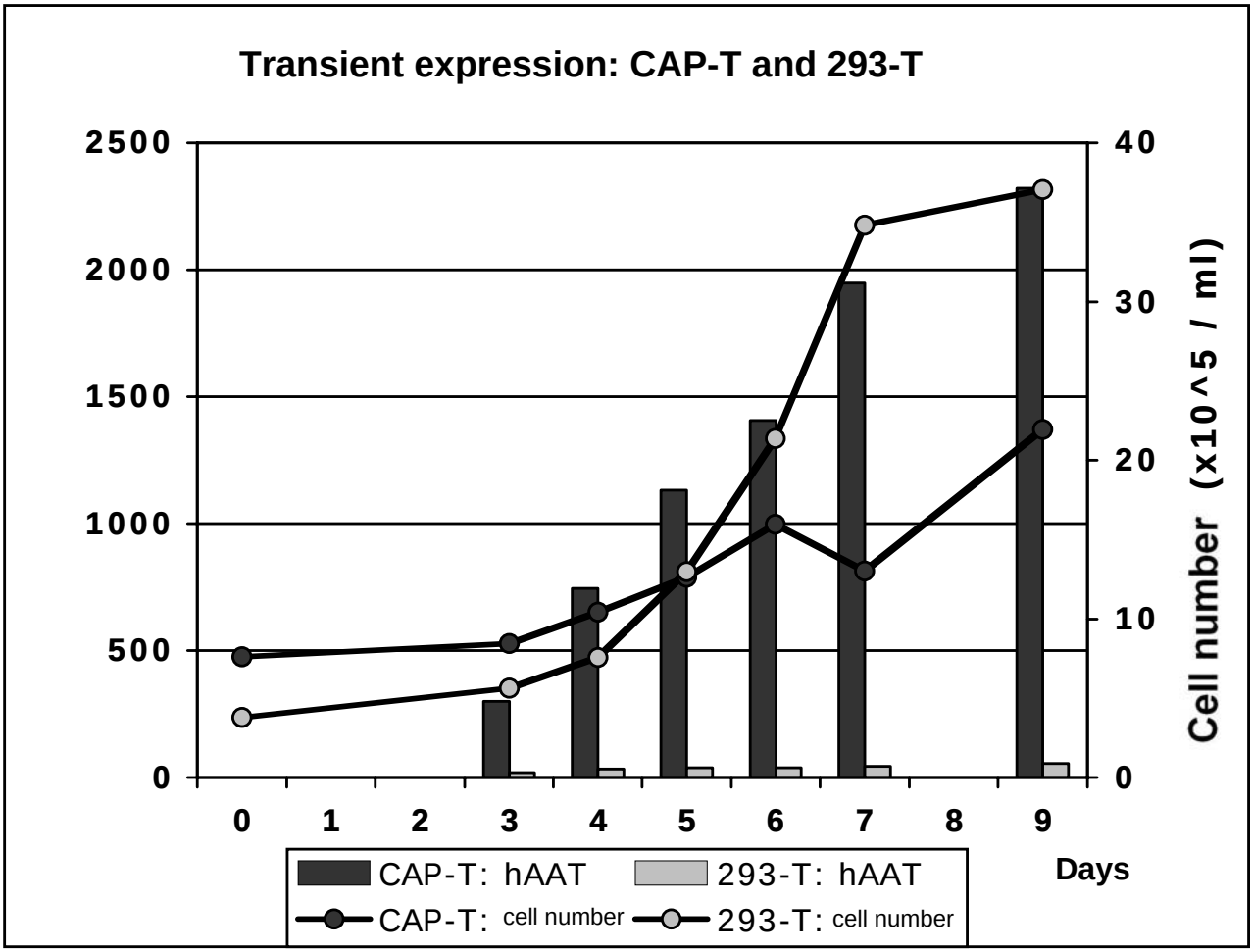

Transient expression: CAP-T and 293-T
2500
2000
1500
1000
500
0
40
30
20
10
0
Cell number (x10^5 / ml)
0 1 2 3 4 5 6 7 8 9
Days
CAP-T: hAAT
293-T: hAAT
CAP-T: cell number
293-T: cell number

Fig. 6

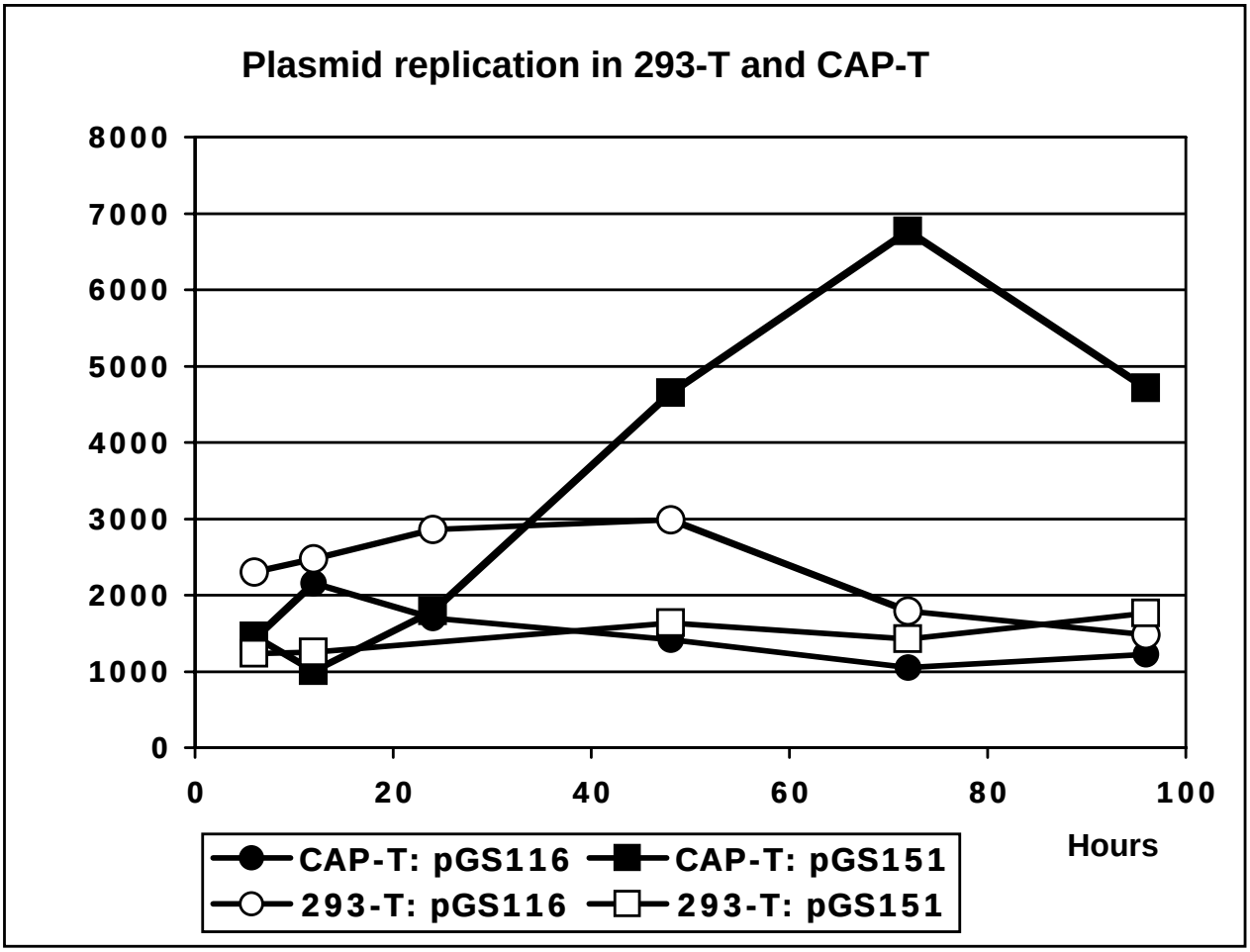
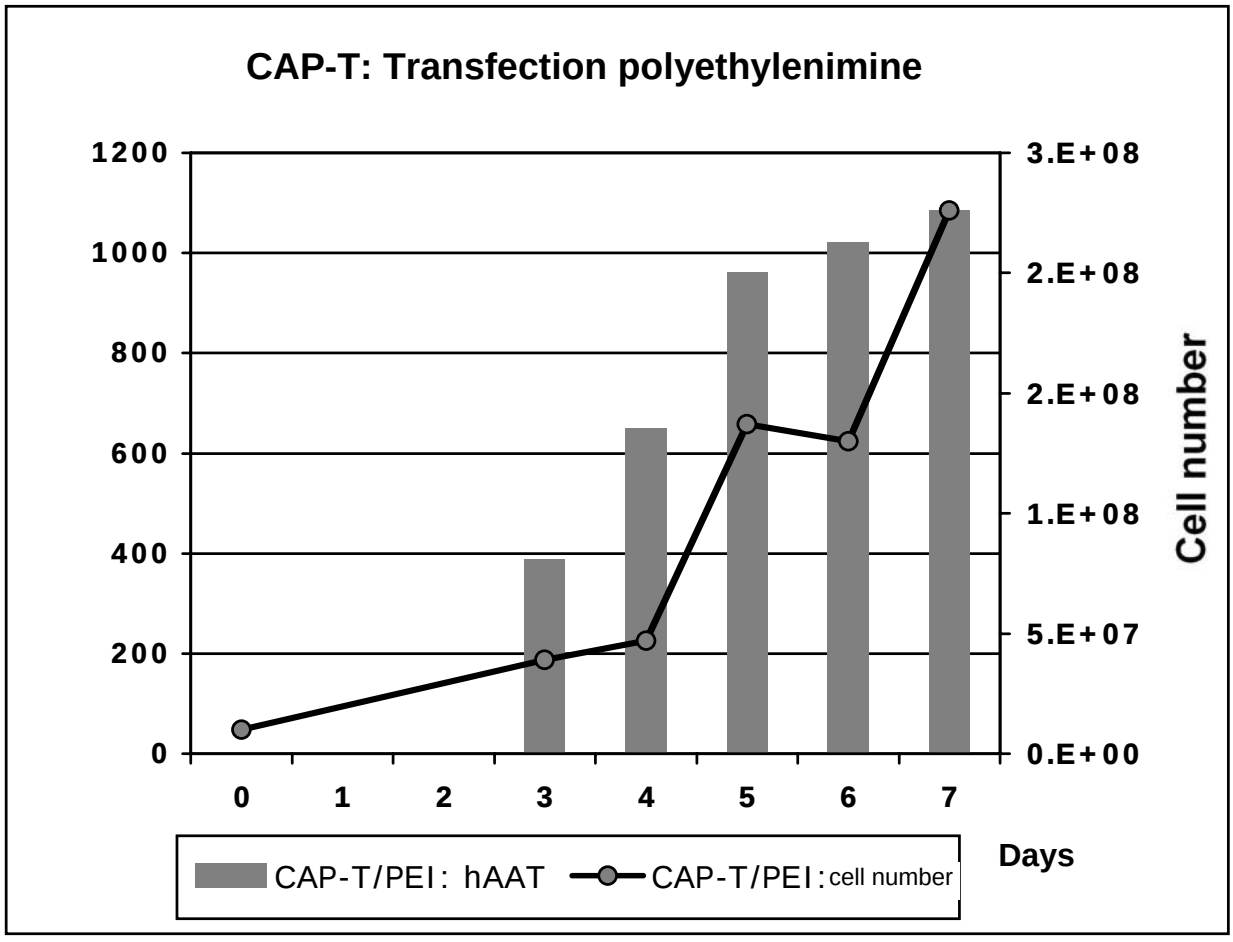

Plasmid replication in 293-T and CAP-T
8000
7000
6000
5000
4000
3000
2000
1000
0
0
20
40
60
80
100
Hours
CAP-T: pGS116
CAP-T: pGS151
293-T: pGS116
293-T: pGS151

Fig. 7


CAP-T: Transfection polyethylenimine
1200
1000
800
600
400
200
0
3.E+08
2.E+08
2.E+08
1.E+08
5.E+07
0.E+00
Cell number
0
1
2
3
4
5
6
7
Days
CAP-T/PEI: hAAT
CAP-T/PEI: cell number