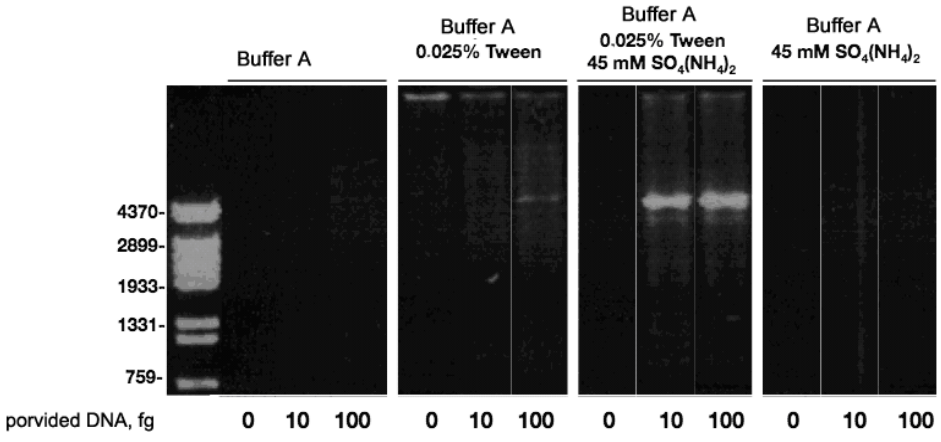

Buffer A
Buffer A
0.025% Tween
Buffer A
0.025% Tween
45 mM $SO_4(NH_4)_2$
Buffer A
45 mM $SO_4(NH_4)_2$
4370-
2899-
1933-
1331-
759-
porvided DNA, fg
0 10 100 0 10 100 0 10 100 0 10 100

FIG. 1

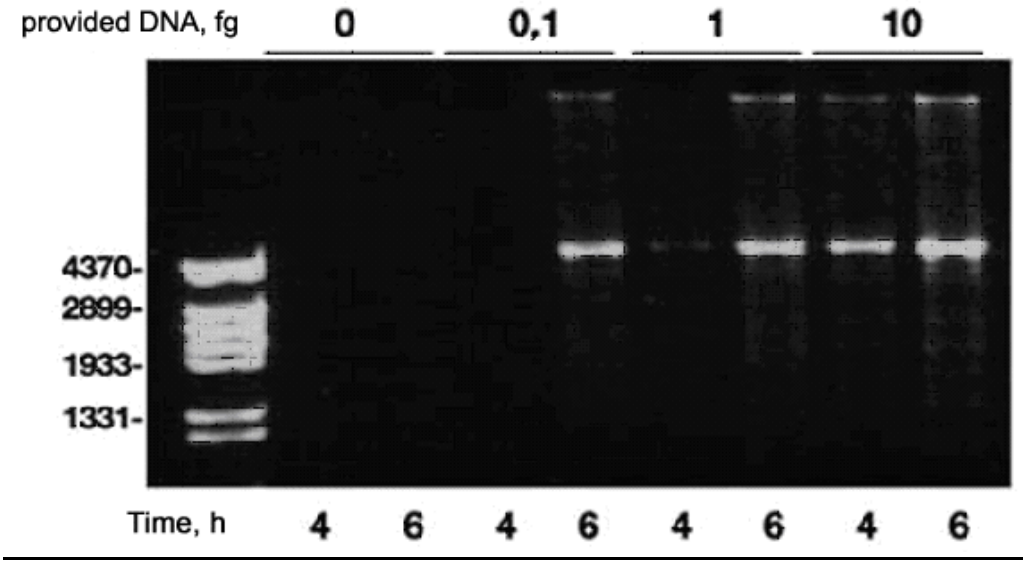

provided DNA, fg
0
0,1
1
10
4370-
2899-
1933-
1331-
Time, h
4 6 4 6 4 6 4 6

FIG. 2

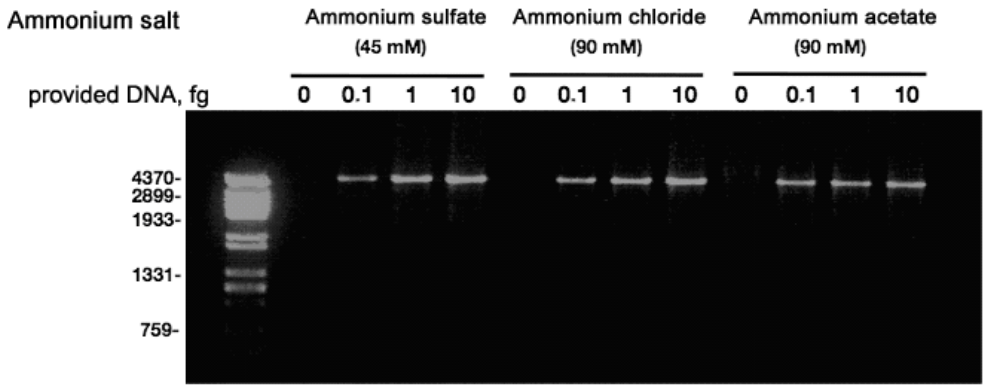

Ammonium salt
Ammonium sulfate (45 mM)
Ammonium chloride (90 mM)
Ammonium acetate (90 mM)
provided DNA, fg
0 0.1 1 10 0 0.1 1 10 0 0.1 1 10
4370-
2899-
1933-
1331-
759-

FIG. 3

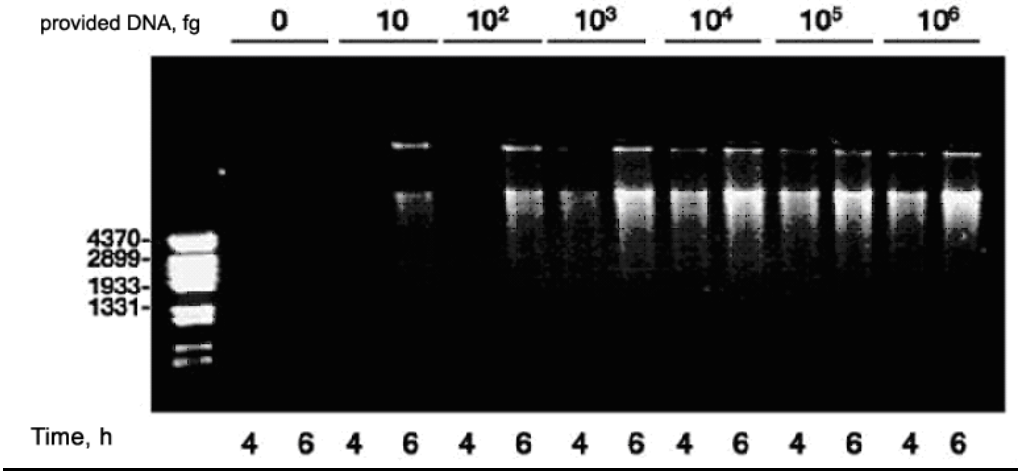

provided DNA, fg
0 10 10² 10³ 10⁴ 10⁵ 10⁶
4370-
2899-
1933-
1331-
Time, h
4 6 4 6 4 6 4 6 4 6 4 6 4 6

FIG. 4

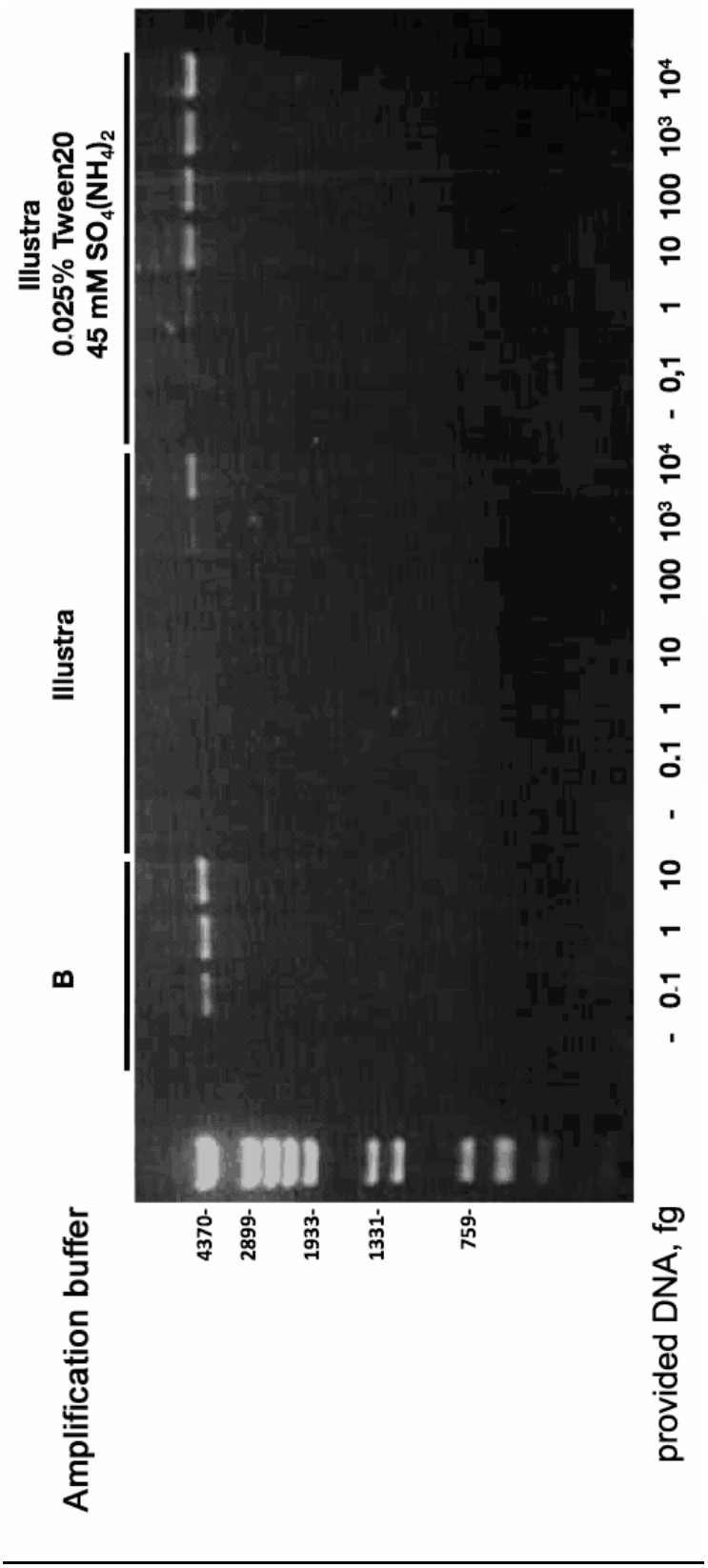
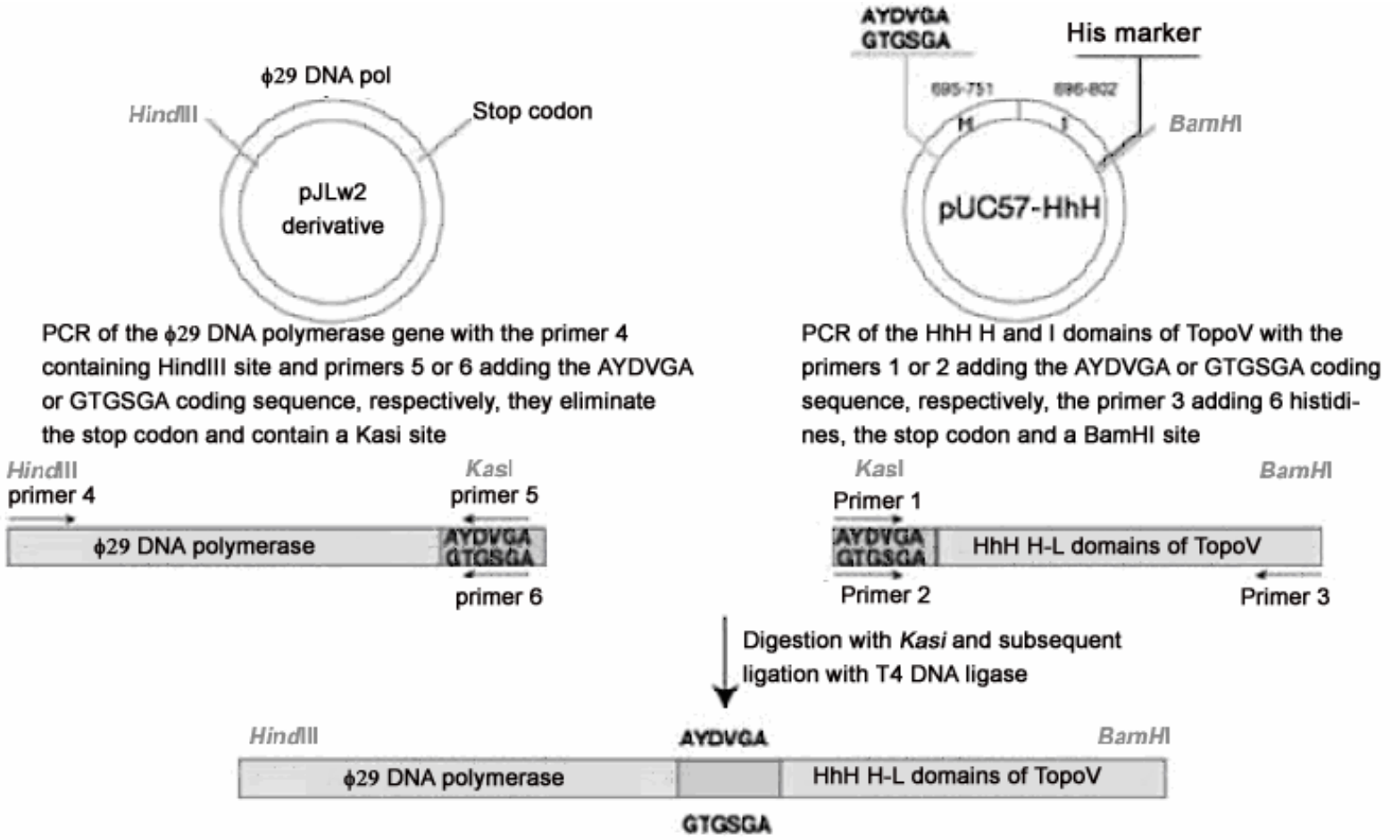

Illustra
0.025% Tween20
45 mM $SO_4(NH_4)_2$
Illustra
B
Amplification buffer
- 0.1 1 10 - 0.1 1 10 100 10^3 10^4 - 0,1 1 10 100 10^3 10^4
provided DNA, fg
4370-
2899-
1933-
1331-
759-

FIG. 5



Cloning in a pJLw2 derivative (HindIII-BamHI)

FIG. 6

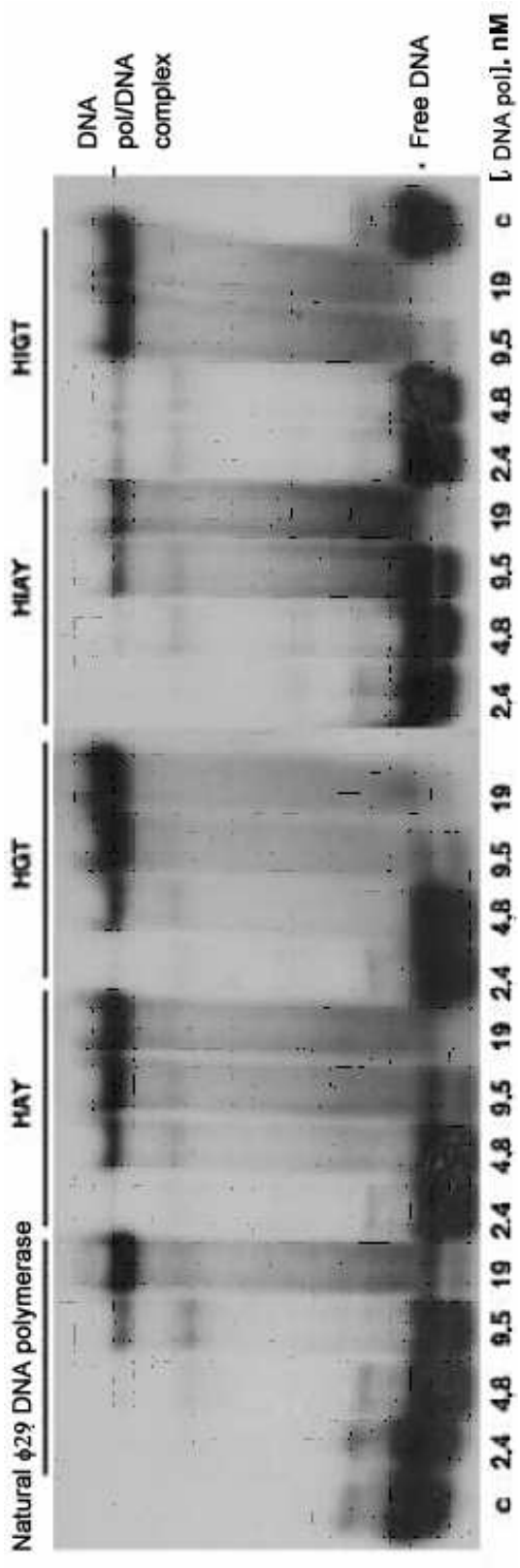

Natural ϕ29 DNA polymerase
HAY
HGT
HIAY
HIGT
c 2.4 4.8 9.5 19 2.4 4.8 9.5 19 2.4 4.8 9.5 19 2.4 4.8 9.5 19 c [DNA pol], nM
DNA pol/DNA complex
Free DNA

FIG. 7

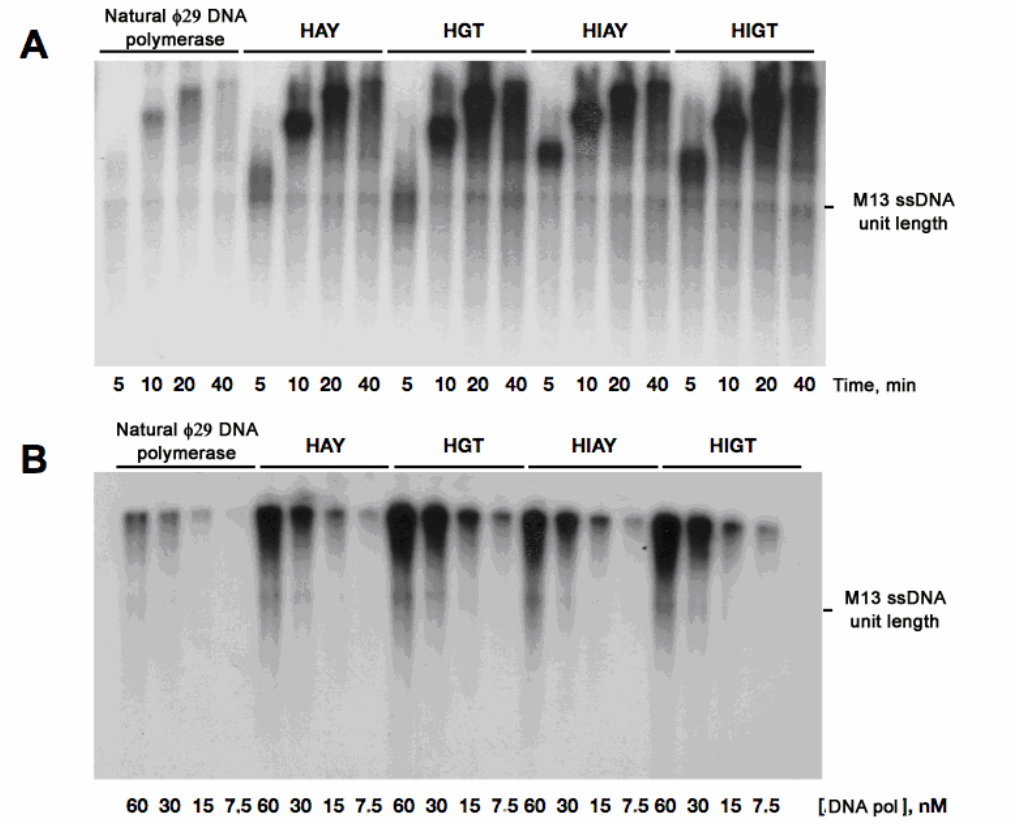

A
Natural ϕ29 DNA polymerase
HAY
HGT
HIAY
HIGT
M13 ssDNA unit length
5 10 20 40 5 10 20 40 5 10 20 40 5 10 20 40 5 10 20 40 Time, min
B
Natural ϕ29 DNA polymerase
HAY
HGT
HIAY
HIGT
M13 ssDNA unit length
60 30 15 7.5 60 30 15 7.5 60 30 15 7.5 60 30 15 7.5 60 30 15 7.5 [DNA pol], nM

FIG. 8

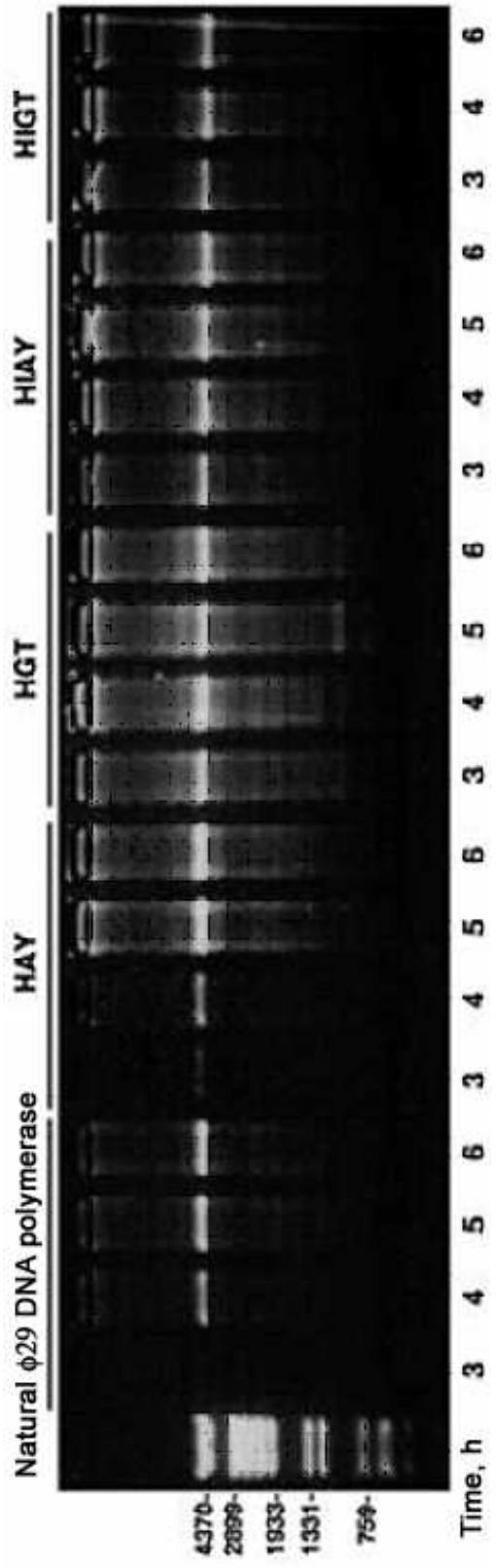

Natural ϕ29 DNA polymerase
HAY
HGT
HIAY
HIGT
Time, h
3 4 5 6 3 4 5 6 3 4 5 6 3 4 5 6
4370-
2699-
1933-
1331-
750-

FIG. 9

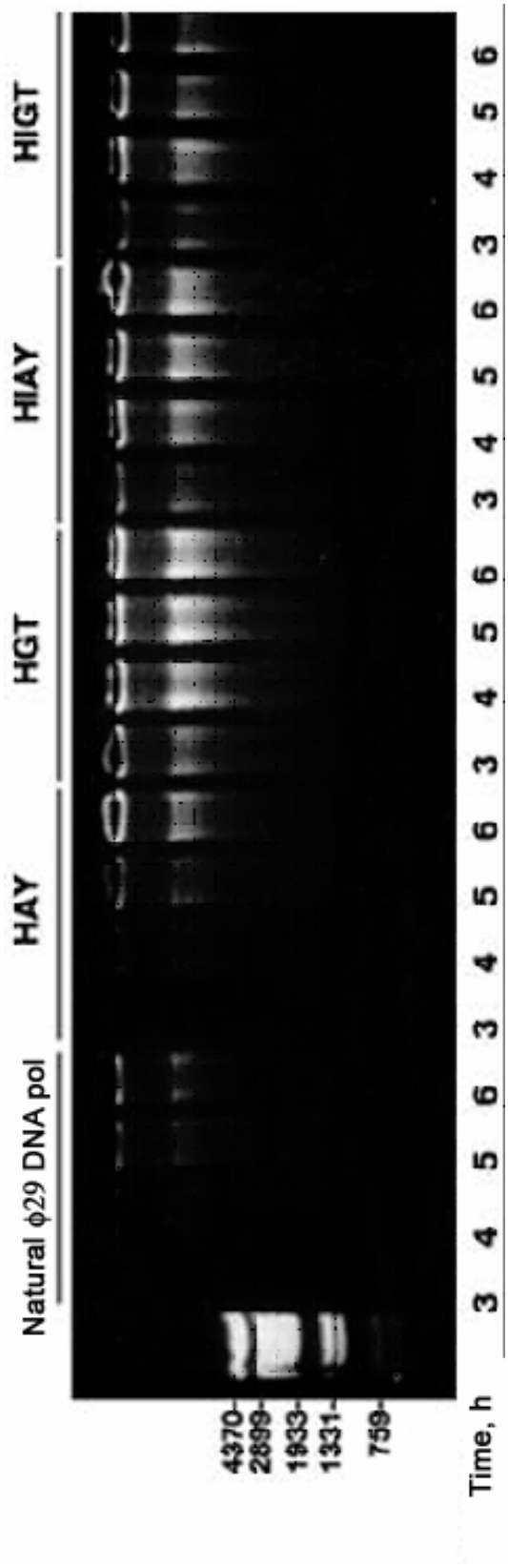

Natural ϕ29 DNA pol
HAY
HGT
HIAY
HIGT
3 4 5 6 3 4 5 6 3 4 5 6 3 4 5 6 3 4 5 6
Time, h
4370
2899
1933
1331
759

FIG. 10