SUBSTITUTE SHEET (RULE 26)

```
S. cerervisiae ADE2  MDSRTVGILGGGQLGRMIVEAANRLNIKTVILDAENSPAKQISNSNDHVN   50
P. pastoris ADE2     MDSQVIGILGGGQLGRMIVEAASRLNIKTVILDDGFSPAKHINAAQDHID   50

S. cerervisiae ADE2  GSFSNPLDIEKLAEKCDVLTIEIEHVDVPTLKNLQVKHPKLKIYPSPETI  100
P. pastoris ADE2     GSFKDEEAIAKLAAKCDVLTVEIEHVNTDALKRVQDRTG-IKIYPLPETI   99

S. cerervisiae ADE2  RLIQDKYIQKEHLIKNGIAVTQSVPVEQASETSLLNVGRDLGFPFVLKSR  150
P. pastoris ADE2     RLIKDKYLQKEHLIKHNISVTKSQGIE-SNEKALLLFGEENGFPYLLKSR  148

S. cerervisiae ADE2  TLAYDGRGNFVVKNKEMIPEALEVLKDRPLYAEKWAPFTKELAVMIVRSV  200
P. pastoris ADE2     TMAYDGRGNFVVESKEDISKALEFLKDRPLYAEKFAPFVKELAVMVVRSL  198

S. cerervisiae ADE2  NGLVFSYPIVETIHKDNICDLCYAPARVPDSVQLKAKLLAENAIKSFPGC  250
P. pastoris ADE2     EGEVFSYPTVETVHKDNICHIVYAPARVNDTIQKKAQILAENTVKTFPGA  248

S. cerervisiae ADE2  GIFGVEMFYLETGELLINEIAPRPHNSGHYTIDACVTSQFEAHLRSILDL  300
P. pastoris ADE2     GIFGVEMFLLSDGELLVNEIAPRPHNSGHYTIDACVTSQFEAHVRAITGL  298

S. cerervisiae ADE2  PMPKNFTSFSTITTNAIMLNVLGDKHTKDKELETCERALATPGSSVYLYG  350
P. pastoris ADE2     PMPLDFTKLSTSNTNAIMLNVLGAEKSHG-ELEFCRRALETPGASVYLYG  347

S. cerervisiae ADE2  KESRPNRKVGHINIIASSMAECEQRLNYITGRTDIPIKISVAQKLDLEAM  400
P. pastoris ADE2     KTTRLARKMGHINIIGSSMLEAEQKLEYILEESTHLPSSTVS------AD  391

S. cerervisiae ADE2  VKPLVGIIMGSDSDLPVMSAACAVLKDFGVPFEVTIVSAHRTPHRMSAYA  450
P. pastoris ADE2     TKPLVGVIMGSDSDLPVISKGCDILKQFGVPFEVTIVSAHRTPQRMTRYA  441

S. cerervisiae ADE2  ISASKRGIKTIIAGAGGAAHLPGMVAAMTPLPVIGVPVKGSCLDGVDSLH  500
P. pastoris ADE2     FEAASRGIKAIIAGAGGAAHLPGMVAAMTPLPVIGVPVKGSTLDGVDSLH  491

S. cerervisiae ADE2  SIVQMPRGVPVATVAINNSTNAALLAVRLLGAYDSSYTTKMEQFLLKQEE  550
P. pastoris ADE2     SIVQMPRGVPVATVAINNATNAALLAIRILGTIDHKWQKEMSKYMNAMET  541

S. cerervisiae ADE2  EVLVKAQKLETVGYEAYLENK                             571
P. pastoris ADE2     EVLGKASNLESEGYESYLKNRL                            563
```

FIG. 1

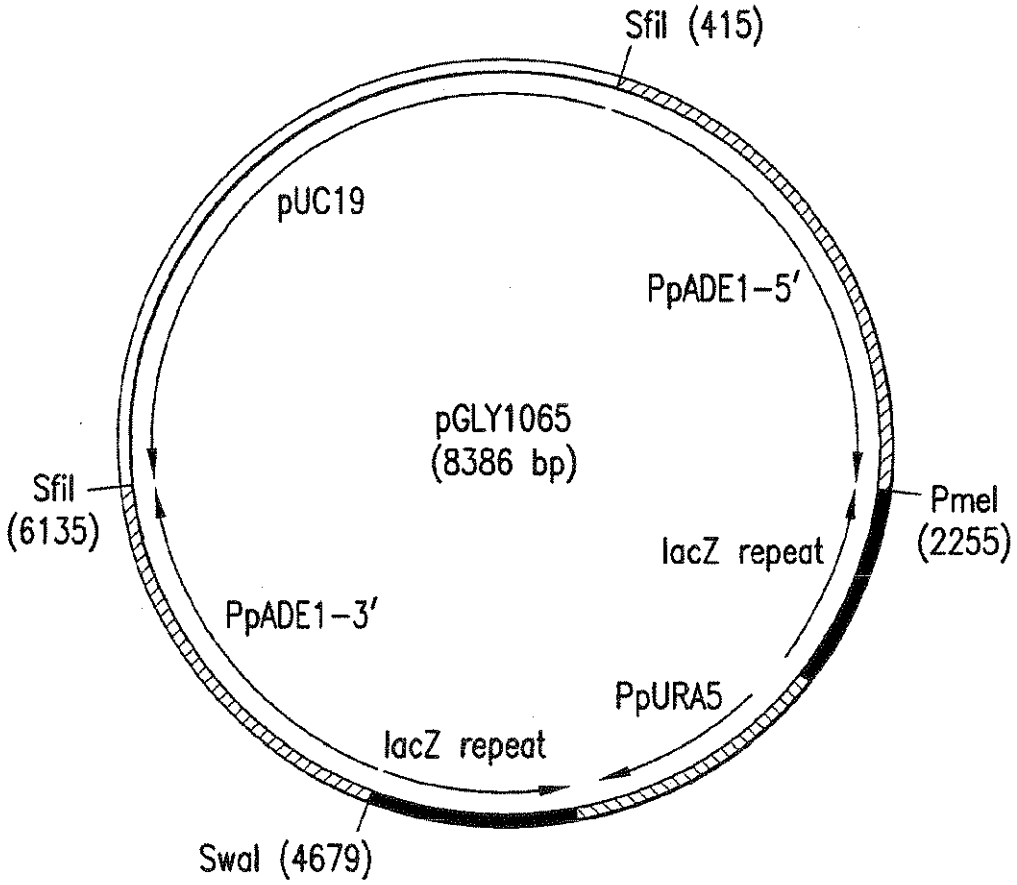

SfiI (415)
pUC19
PpADE1-5′
pGLY1065
(8386 bp)
SfiI
(6135)
PmeI
(2255)
lacZ repeat
PpADE1-3′
PpURA5
lacZ repeat
SwaI (4679)

FIG.2A

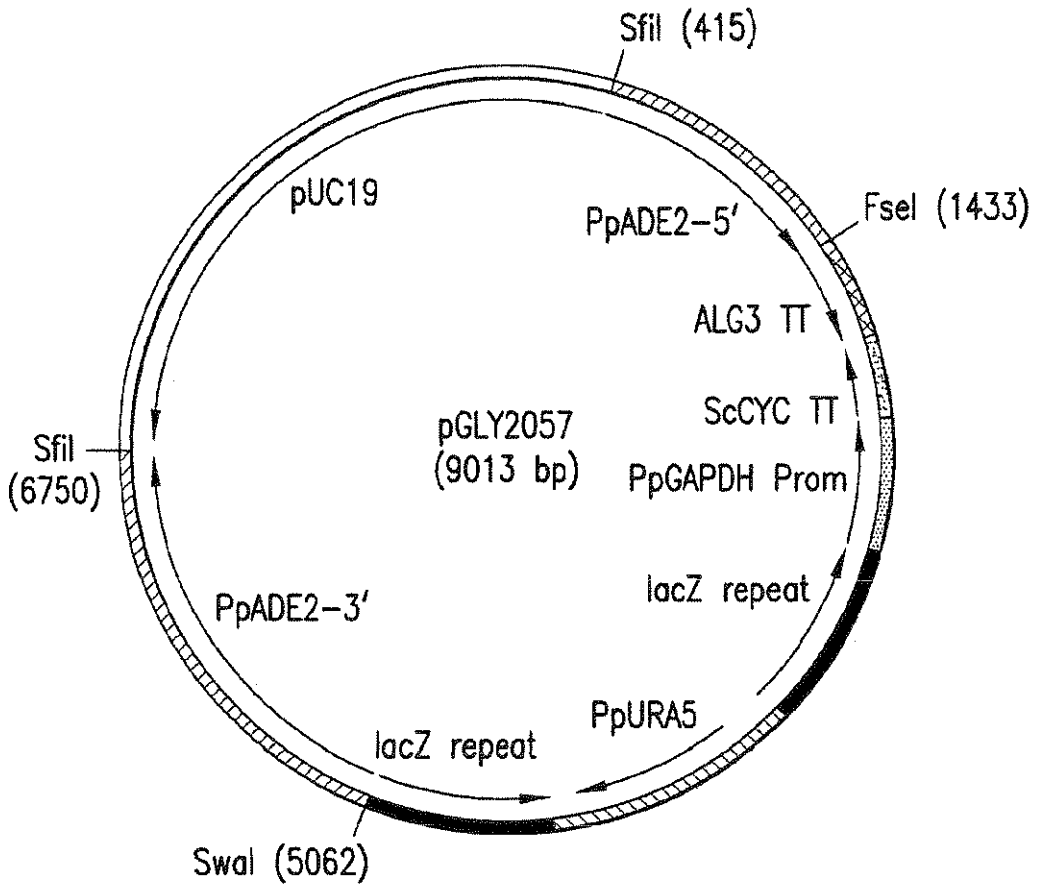

SfiI (415)
FseI (1433)
pUC19
PpADE2-5′
ALG3 TT
ScCYC TT
pGLY2057
(9013 bp)
PpGAPDH Prom
SfiI
(6750)
lacZ repeat
PpADE2-3′
PpURA5
lacZ repeat
SwaI (5062)

FIG.2B

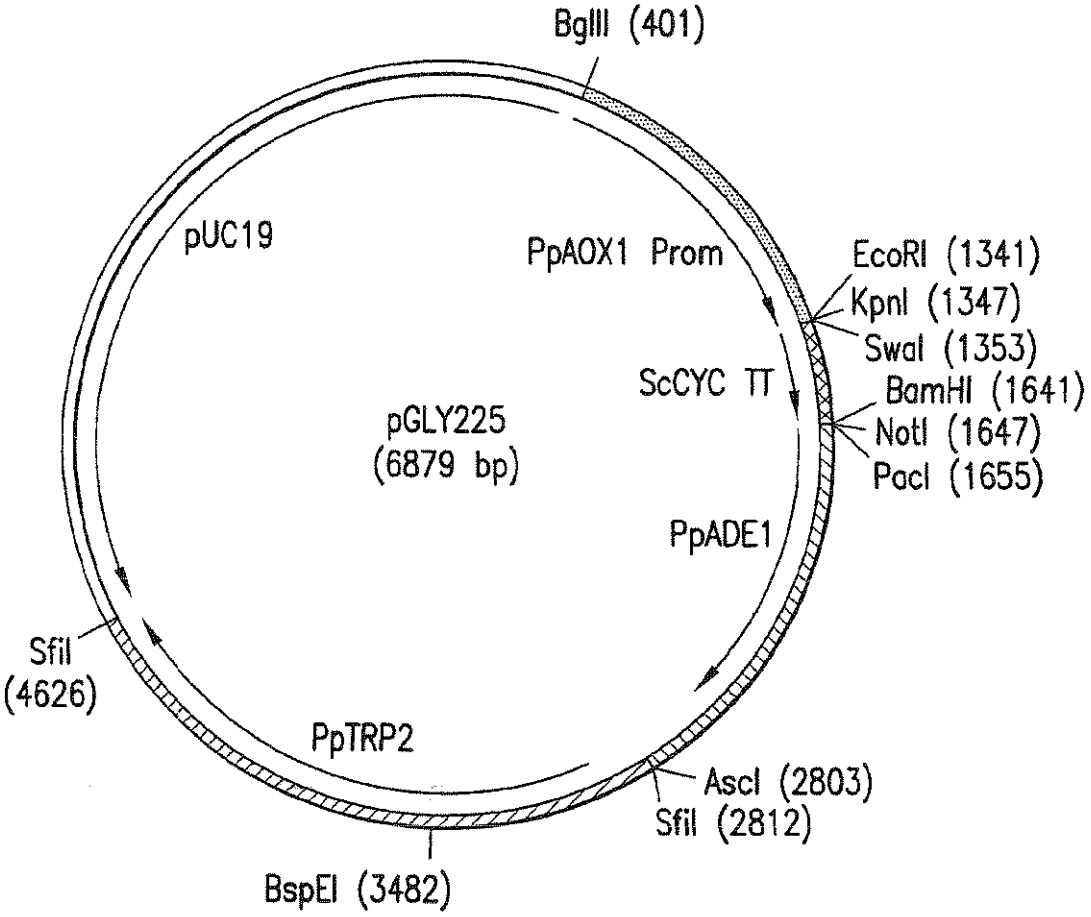

BglII (401)
pUC19
PpAOX1 Prom
EcoRI (1341)
KpnI (1347)
SwaI (1353)
ScCYC TT
BamHI (1641)
NotI (1647)
PacI (1655)
pGLY225
(6879 bp)
PpADE1
SfiI
(4626)
PpTRP2
AscI (2803)
SfiI (2812)
BspEI (3482)

FIG.2C

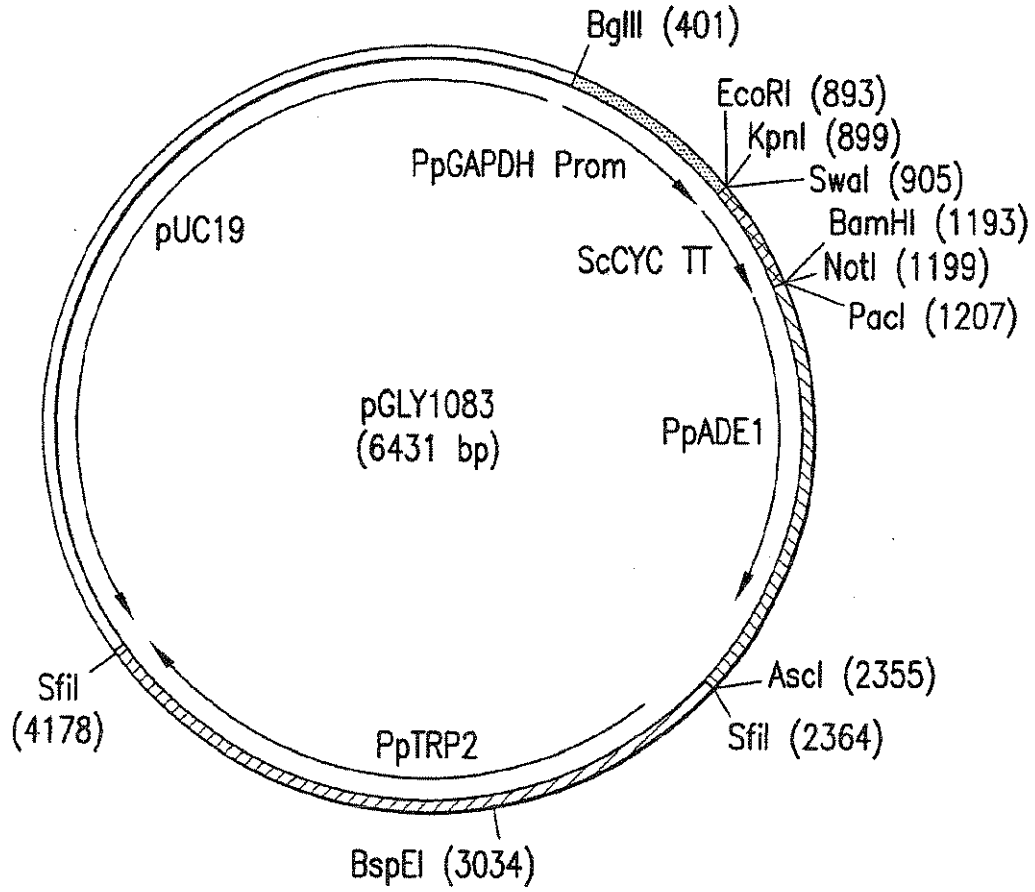

BglII (401)
EcoRI (893)
KpnI (899)
SwaI (905)
BamHI (1193)
NotI (1199)
PacI (1207)
PpGAPDH Prom
pUC19
ScCYC TT
pGLY1083
(6431 bp)
PpADE1
AscI (2355)
SfiI (2364)
SfiI
(4178)
PpTRP2
BspEI (3034)

FIG.2D

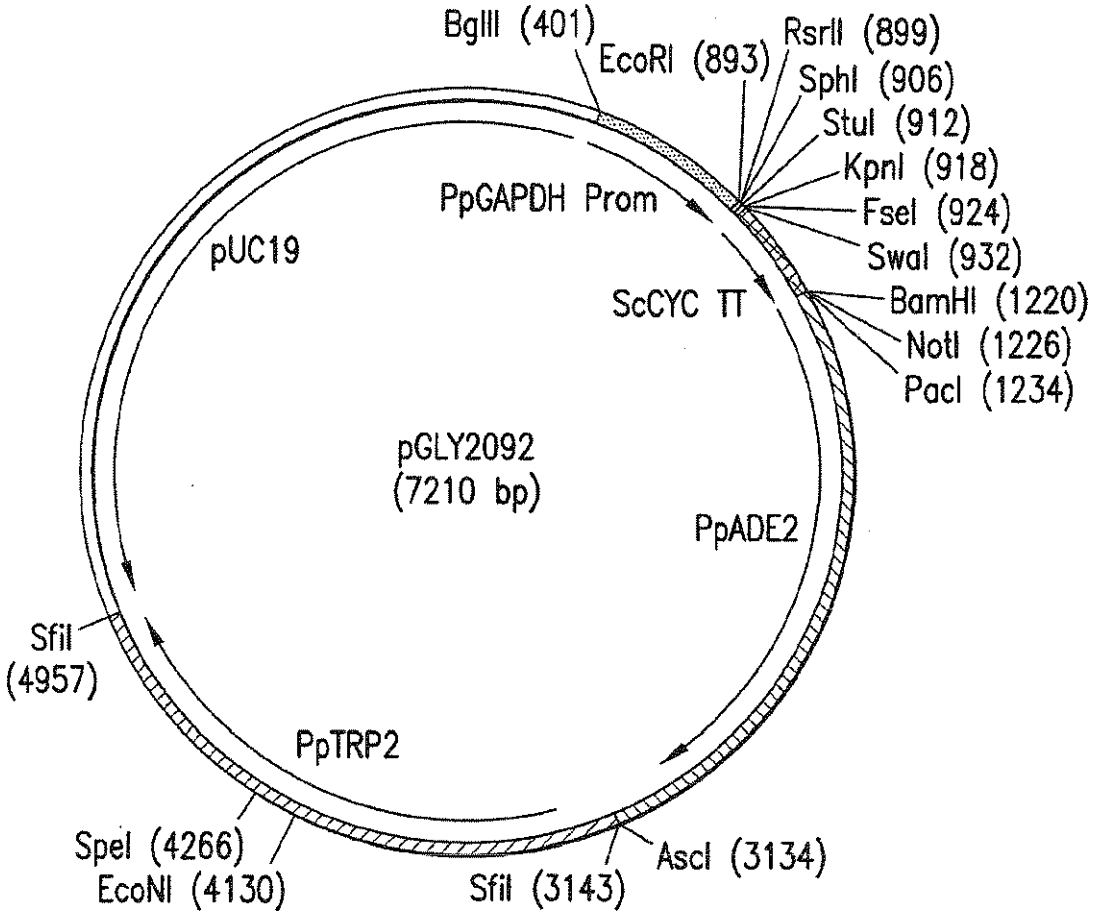

BglII (401)
EcoRI (893)
RsrII (899)
SphI (906)
StuI (912)
KpnI (918)
FseI (924)
SwaI (932)
BamHI (1220)
NotI (1226)
PacI (1234)
PpGAPDH Prom
pUC19
ScCYC TT
pGLY2092
(7210 bp)
PpADE2
SfiI
(4957)
PpTRP2
SpeI (4266)
EcoNI (4130)
SfiI (3143)
AscI (3134)

FIG.2E

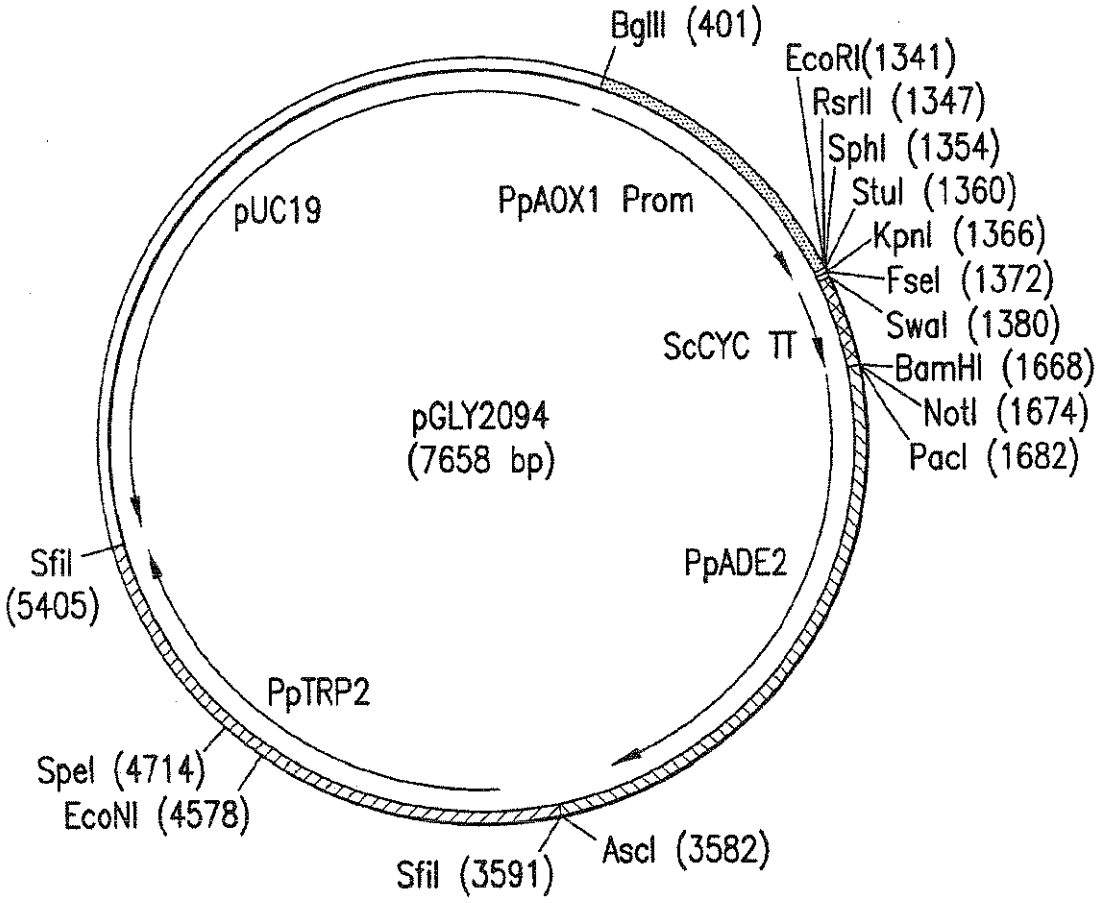

BglII (401)
EcoRI(1341)
RsrII (1347)
SphI (1354)
StuI (1360)
KpnI (1366)
FseI (1372)
SwaI (1380)
BamHI (1668)
NotI (1674)
PacI (1682)
pUC19
PpAOX1 Prom
ScCYC TT
pGLY2094
(7658 bp)
PpADE2
SfiI
(5405)
PpTRP2
SpeI (4714)
EcoNI (4578)
SfiI (3591)
AscI (3582)

FIG.2F

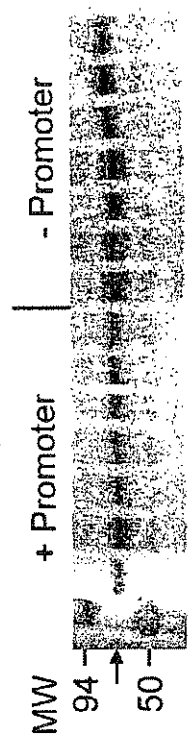


FIG.3B

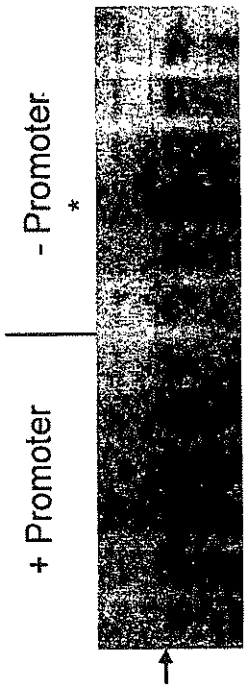


FIG.3D

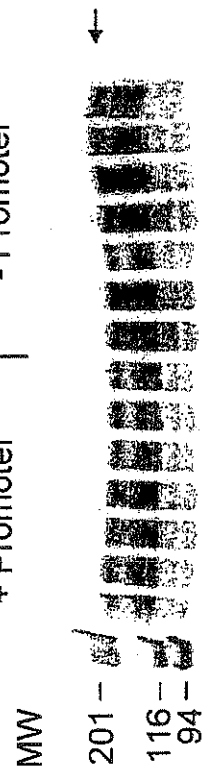


FIG.3A



FIG.3C

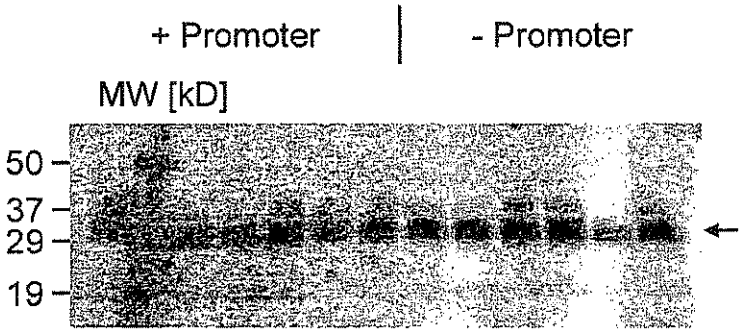

+ Promoter
- Promoter
MW [kD]
50
37
29
19

FIG.4A

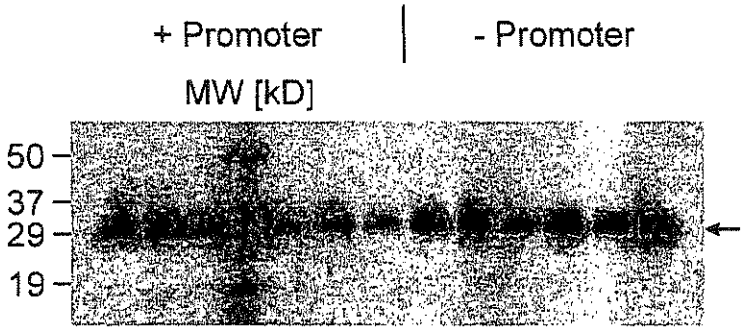

+ Promoter
- Promoter
MW [kD]
50
37
29
19

FIG.4B