Fig.1

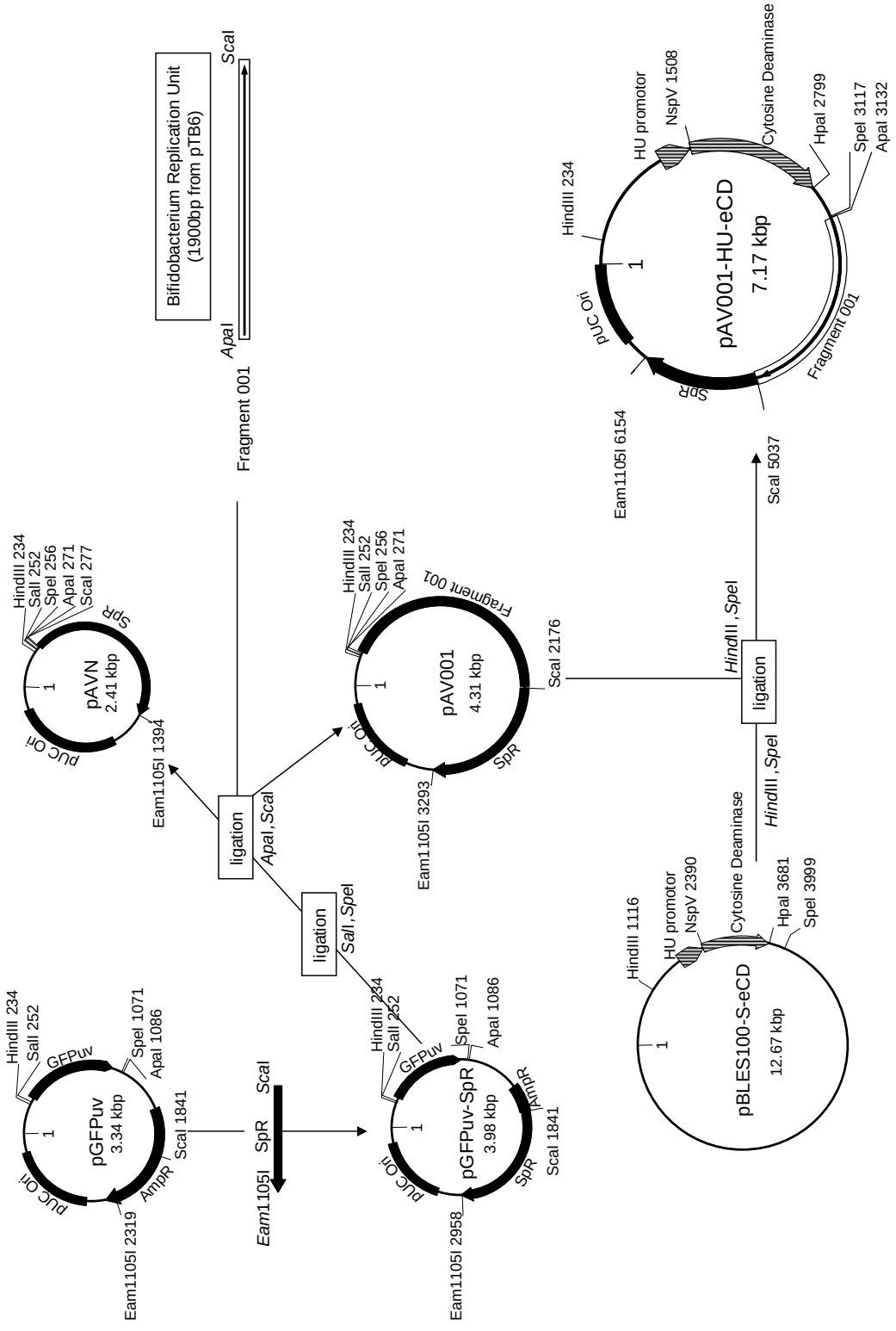
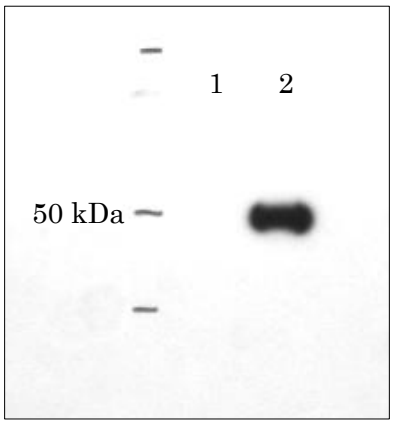

Bifidobacterium Replication Unit
(1900bp from pTB6)
ScaI
ApaI
Fragment 001
pAVN
2.41 kbp
HindIII 234
SalI 252
SpeI 256
ApaI 271
ScaI 277
SpR
pUC Ori
Eam1105I 1394
pAV001
4.31 kbp
Fragment 001
Eam1105I 3293
SpR
pGFPuv
3.34 kbp
GFPuv
SpeI 1071
ApaI 1086
ScaI 1841
AmpR
Eam1105I 2319
pGFPuv-SpR
3.98 kbp
Eam1105I 2958
ligation
ApaI,ScaI
SalI,SpeI
HindIII,SpeI
Eam1105I SpR ScaI
pAV001-HU-eCD
7.17 kbp
HindIII 234
HU promotor
NspV 1508
Cytosine Deaminase
HpaI 2799
SpeI 3117
ApaI 3132
Fragment 001
Eam1105I 6154
ScaI 5037
pBLES100-S-eCD
12.67 kbp
HindIII 1116
HU promotor
NspV 2390
Cytosine Deaminase
HpaI 3681
SpeI 3999

Fig.2



1. Wild-type Bifodobacterium longum
2. Bifodobacterium longum/pAV001-HU-eCD

Fig.3

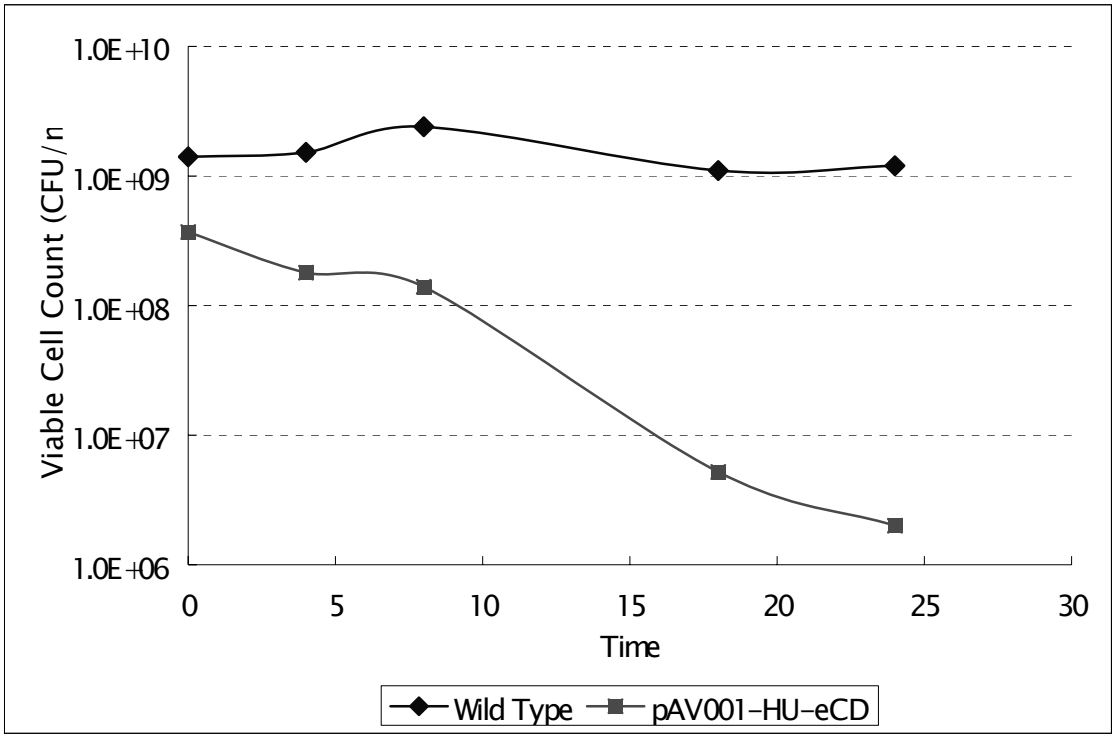
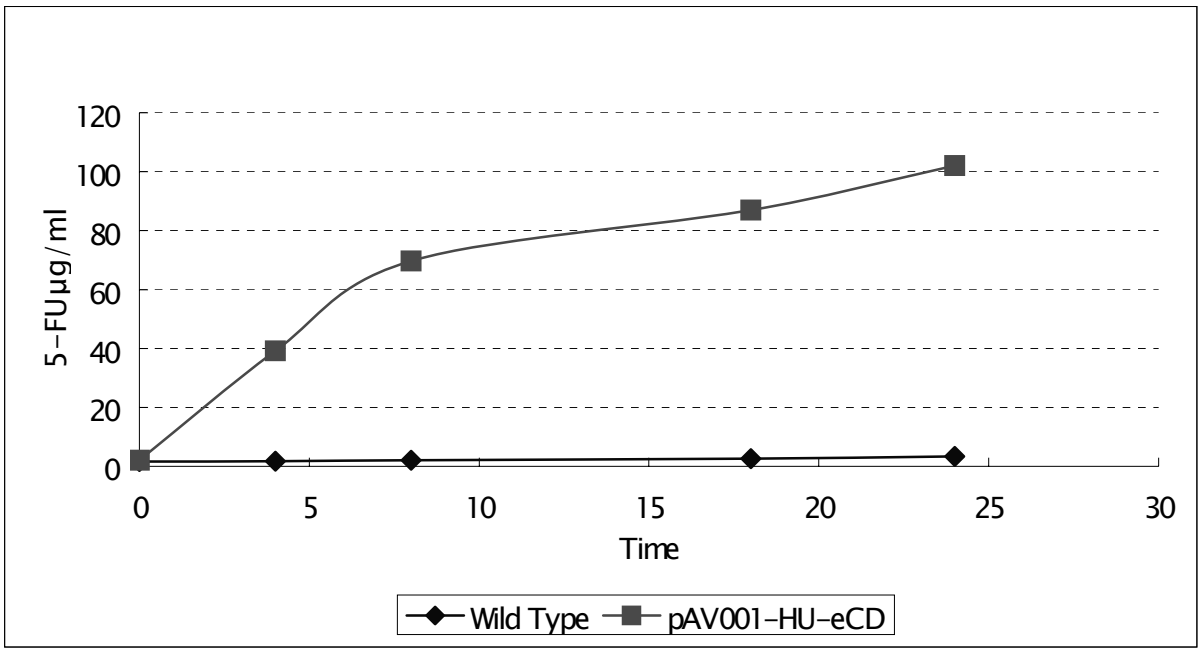


Fig.4


120
100
80
60
40
20
0
5-FUμg/ml
0
5
10
15
20
25
30
Time
Wild Type
pAV001-HU-eCD