Fig. 1A

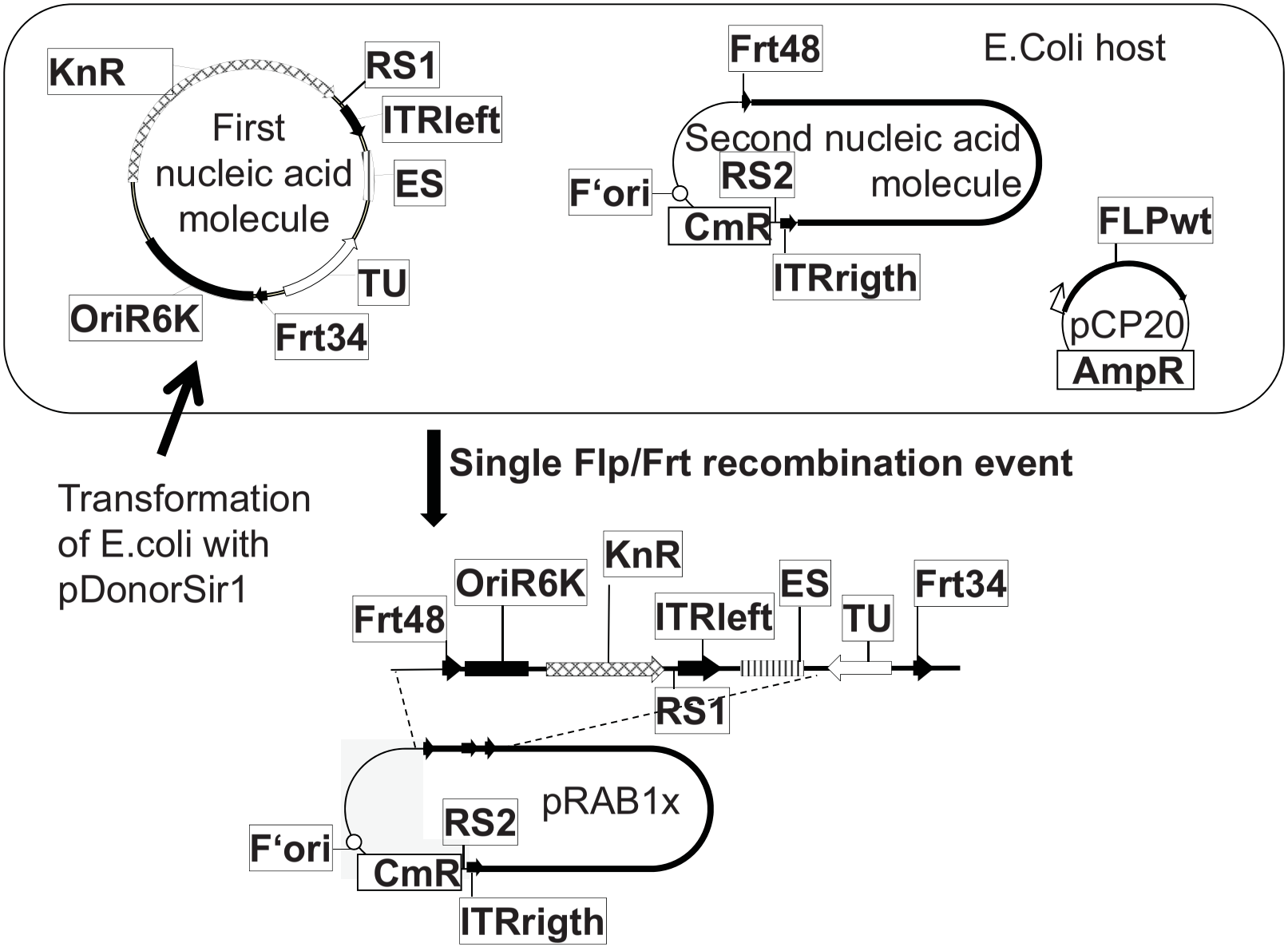

KnR
RS1
ITRleft
ES
First nucleic acid molecule
TU
OriR6K
Frt34
Frt48
E.Coli host
Second nucleic acid molecule
RS2
F'ori
CmR
ITRrigth
FLPwt
pCP20
AmpR
Transformation of E.coli with pDonorSir1
Single Flp/Frt recombination event
OriR6K
KnR
ES
Frt34
Frt48
ITRleft
TU
RS1
pRAB1x
RS2
F'ori
CmR
ITRrigth

Fig. 1B

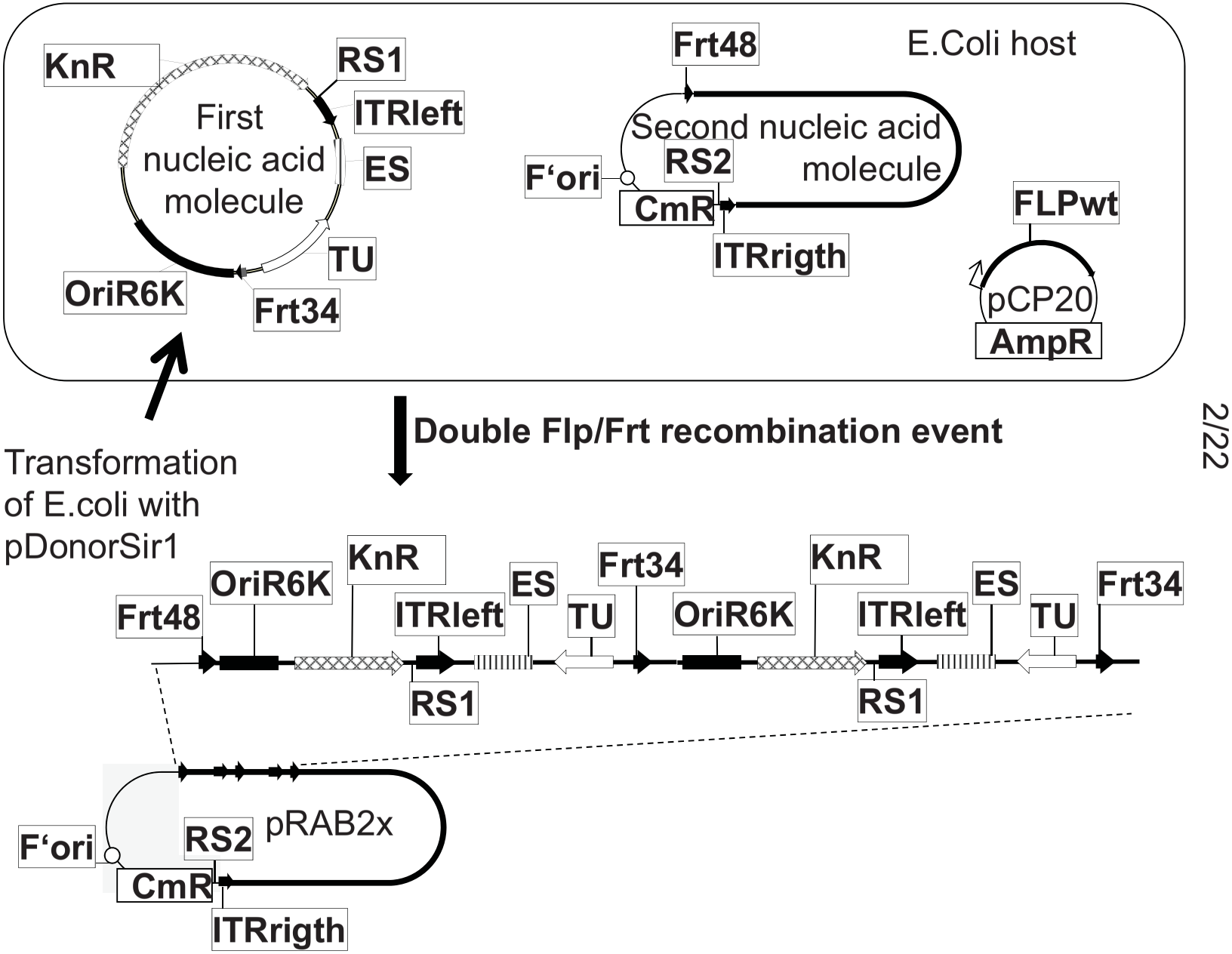
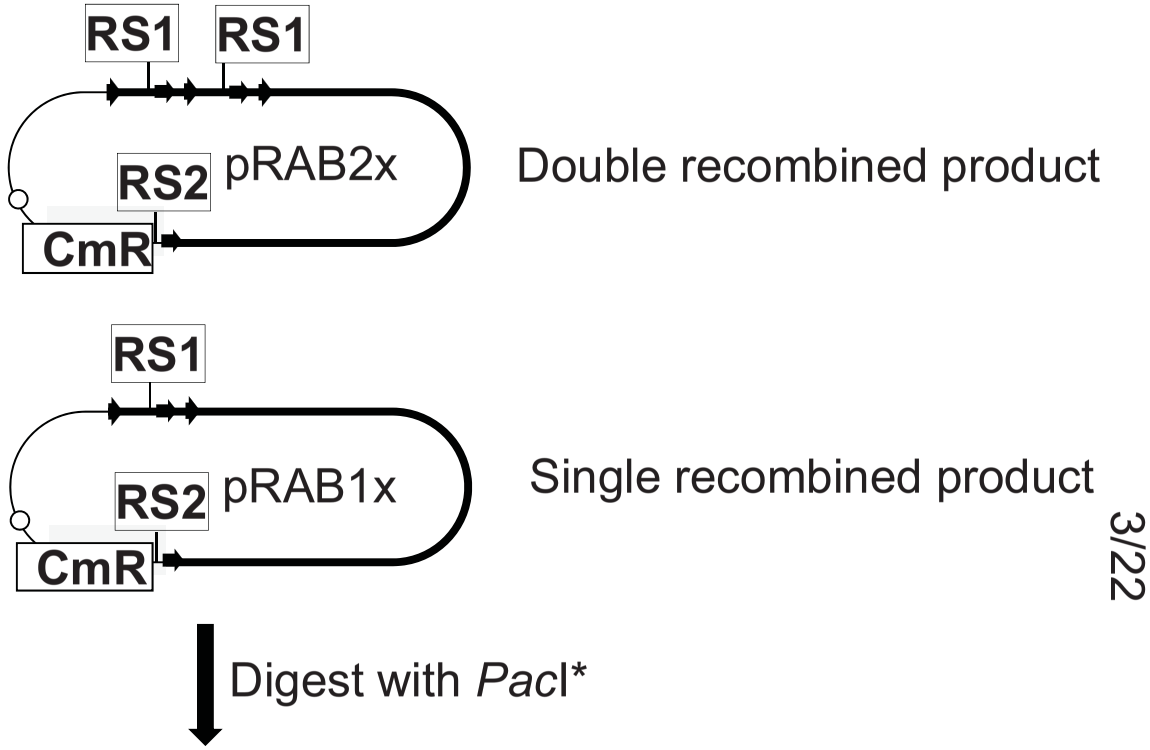

KnR
RS1
ITRleft
First
nucleic acid
molecule
ES
TU
OriR6K
Frt34
Frt48
E.Coli host
Second nucleic acid
molecule
F'ori
RS2
CmR
ITRrigth
FLPwt
pCP20
AmpR
Transformation
of E.coli with
pDonorSir1
Double Flp/Frt recombination event
Frt48
OriR6K
KnR
ITRleft
ES
TU
Frt34
OriR6K
KnR
ITRleft
ES
TU
Frt34
RS1
RS1
F'ori
RS2
pRAB2x
CmR
ITRrigth

Fig. 1C



Viable Adenovirus
From >126/132 (95,5%) of clones

* RS1 = RS2 = *Pac*I

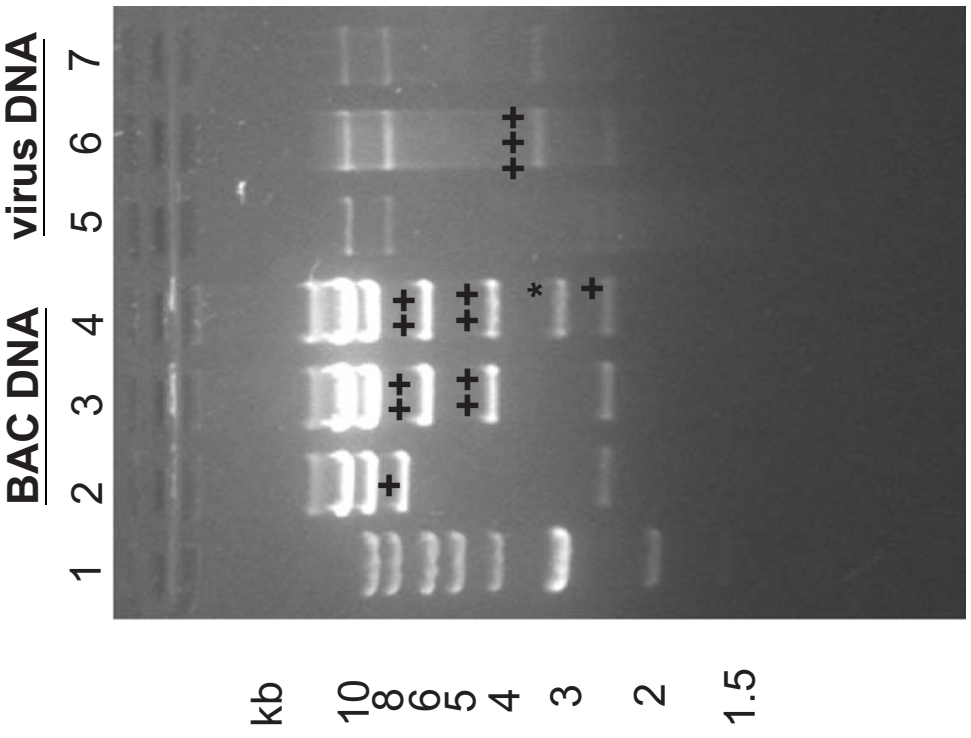


Fig. 2A

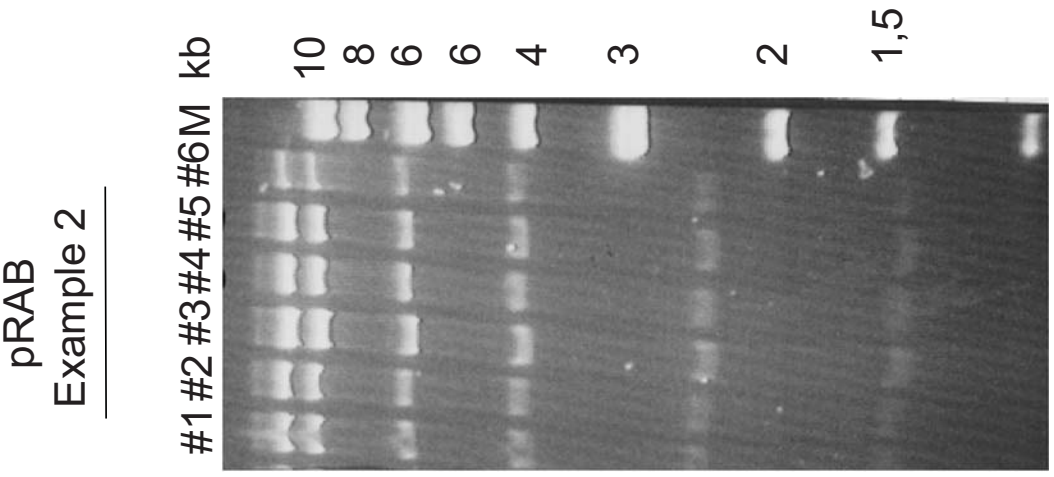


Fig. 2B

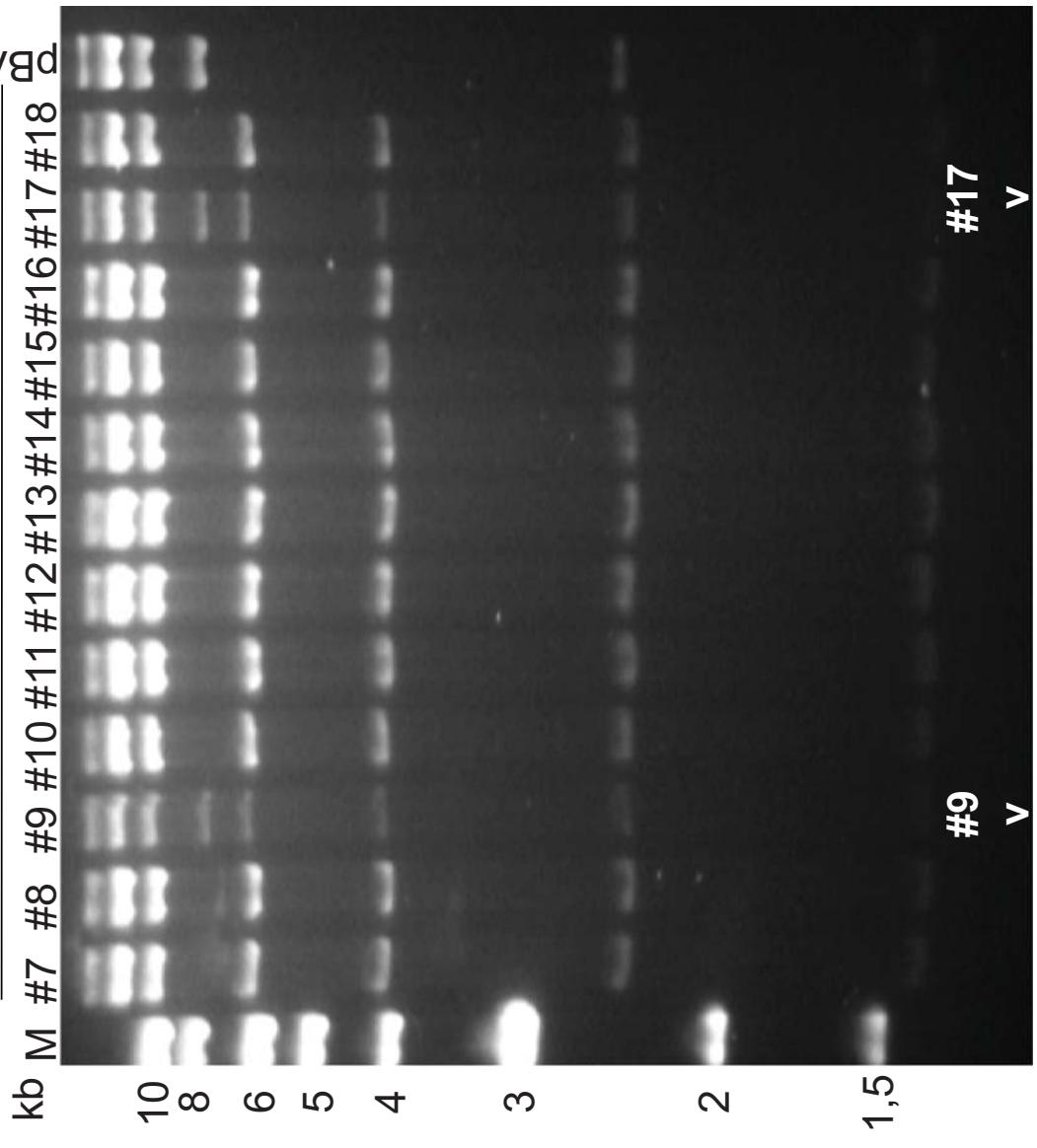


Fig. 2B continued

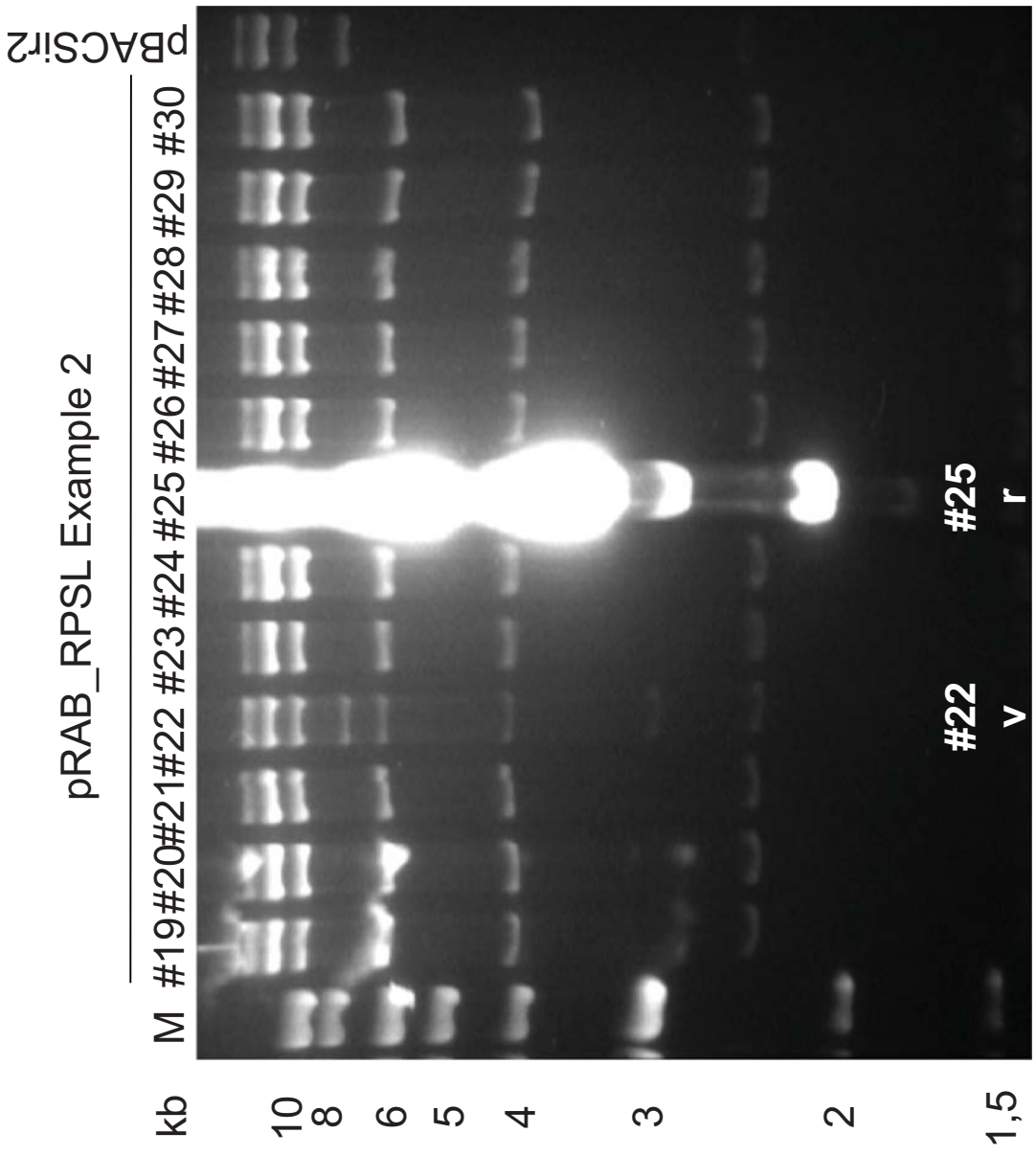


Fig. 2B continued

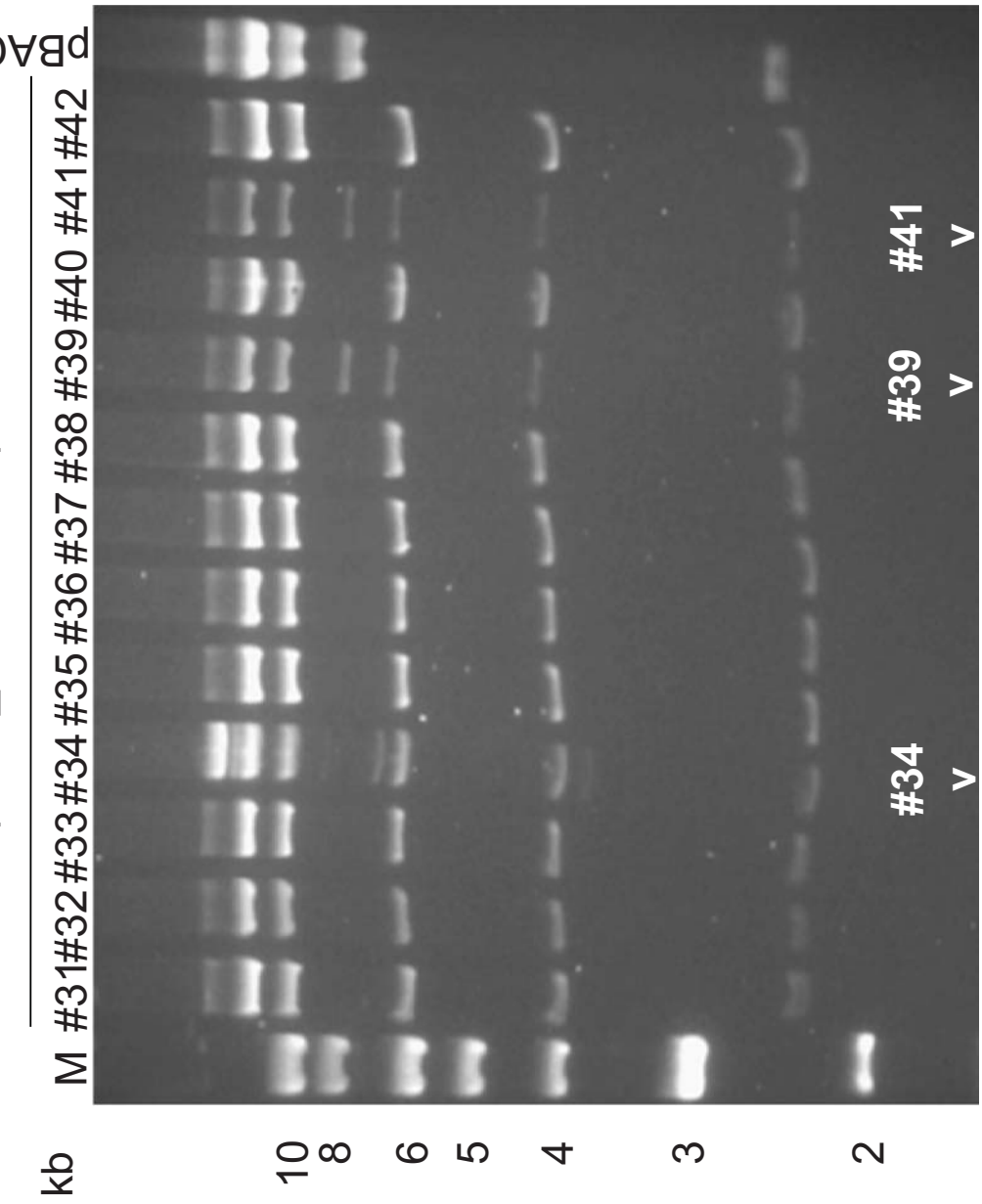


Fig. 2B continued

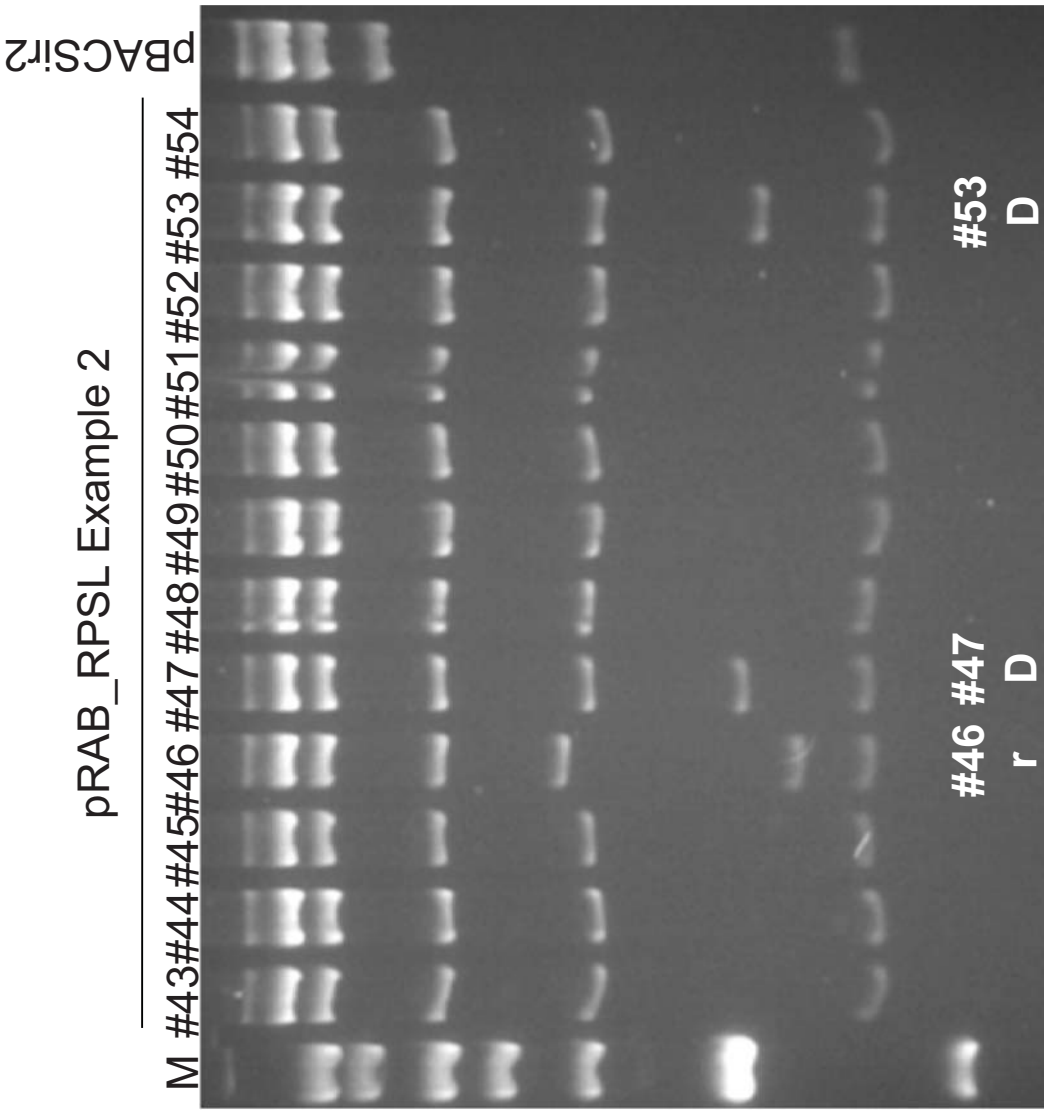


Fig. 2B continued

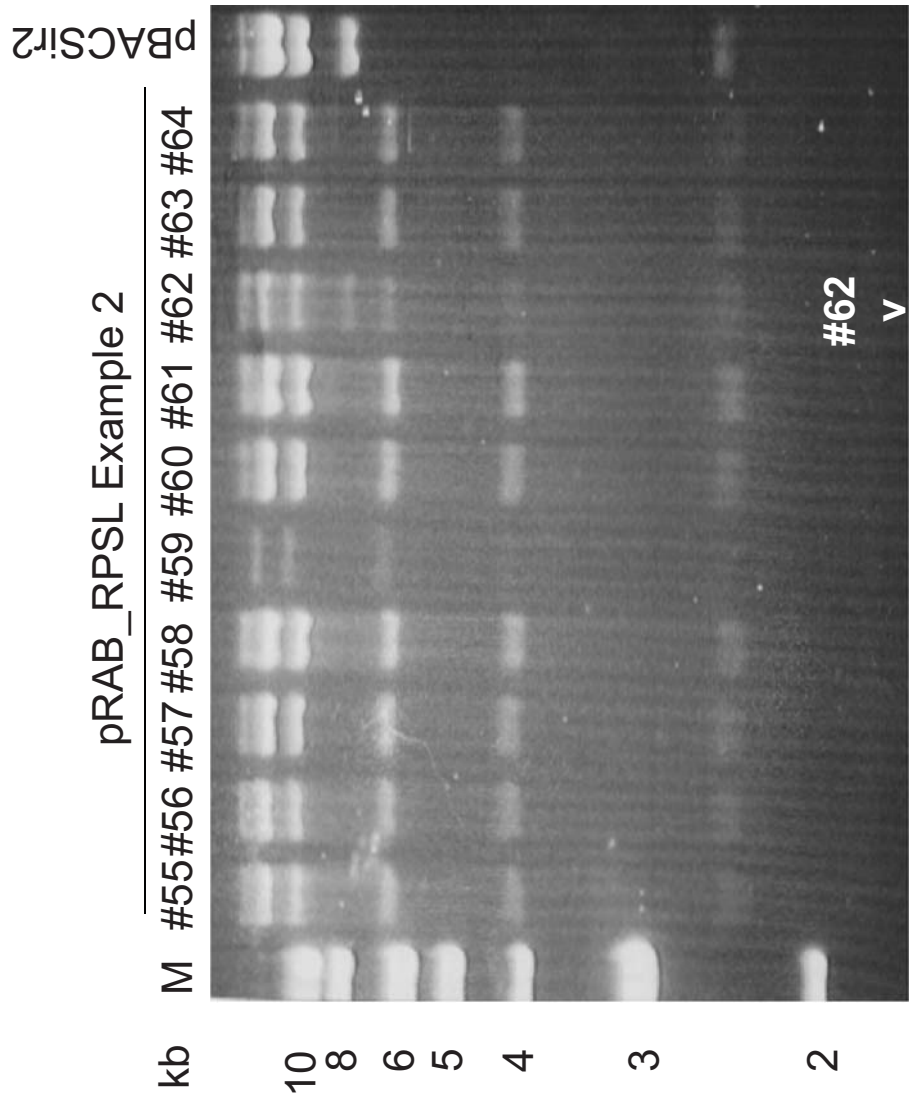


Fig. 2B continued

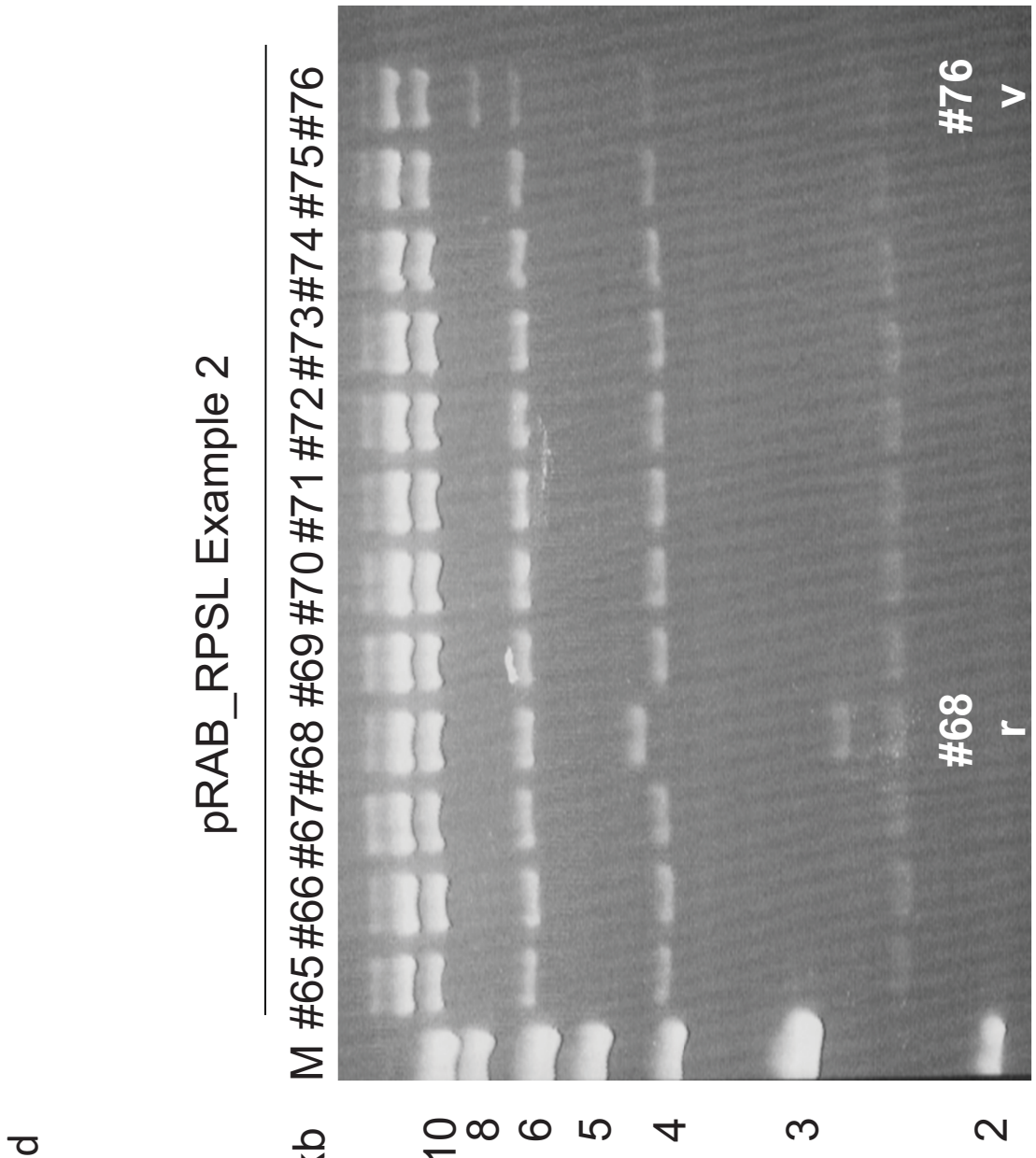


Fig. 2B continued

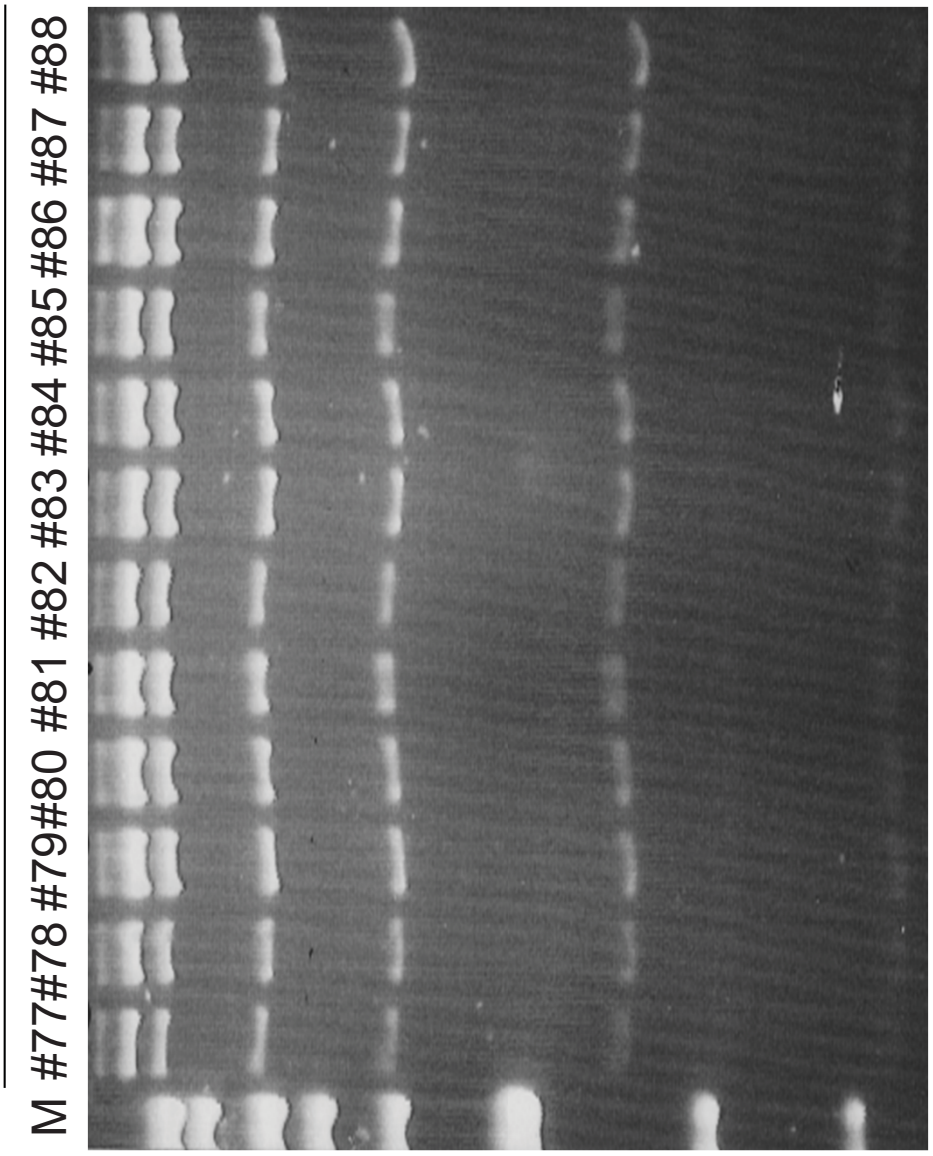


Fig. 2B continued

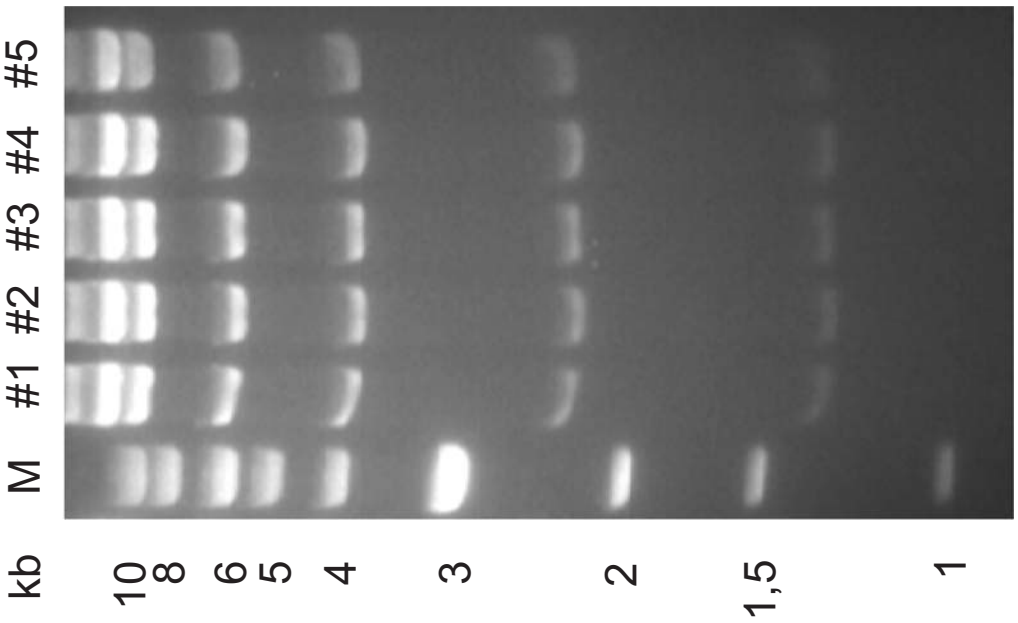


Fig. 2B continued

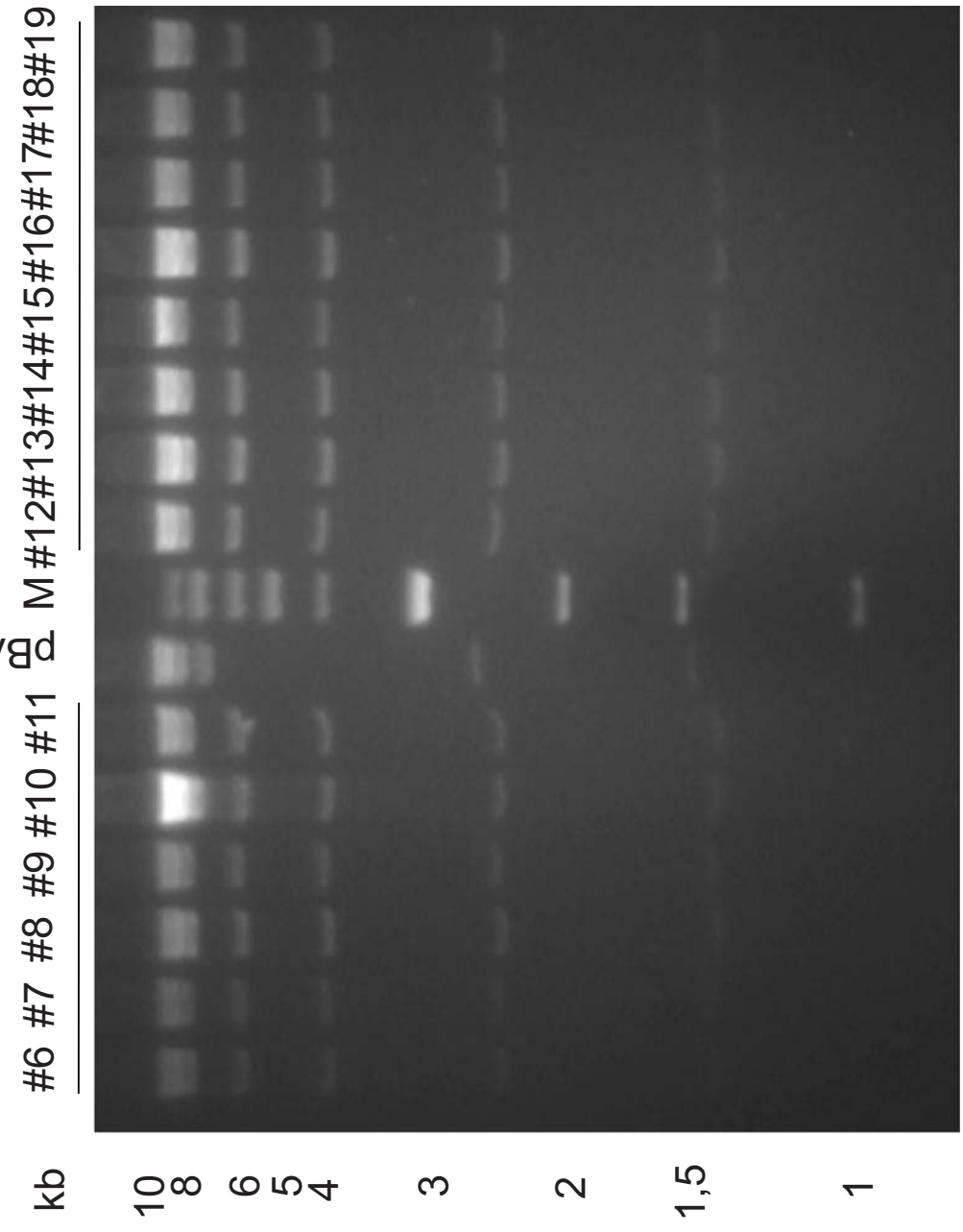
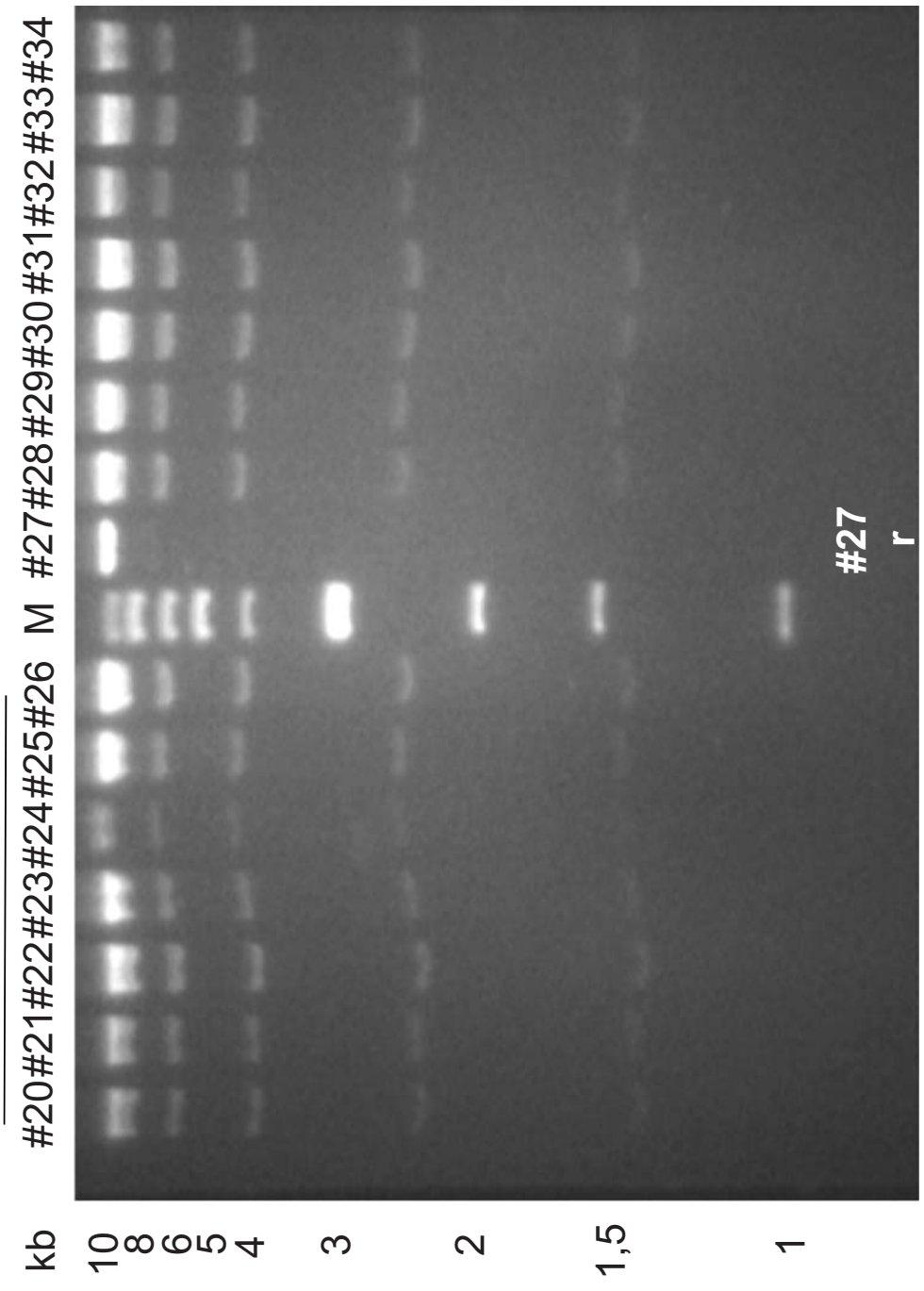


Fig. 2B continued

Fig. 2B continued



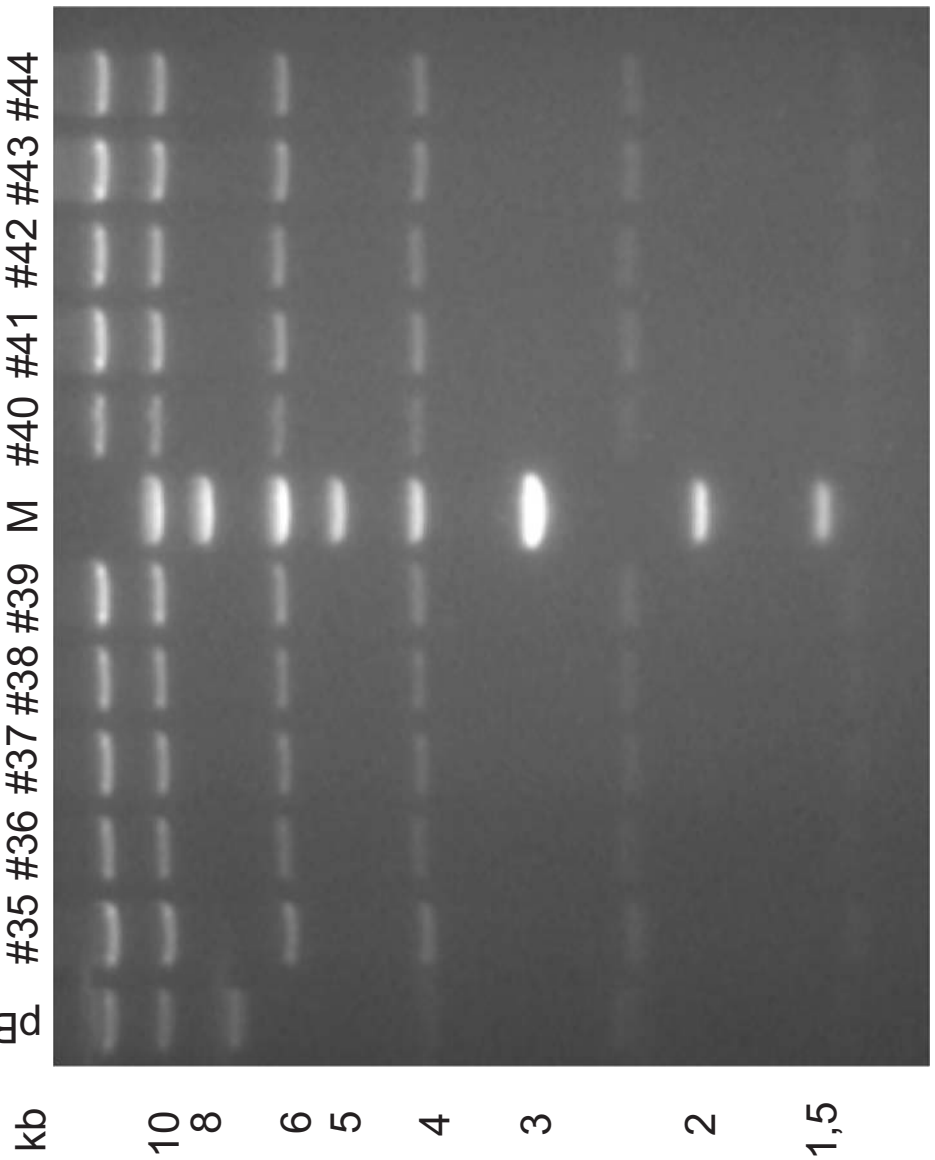


Fig. 2B continued

Fig. 3A

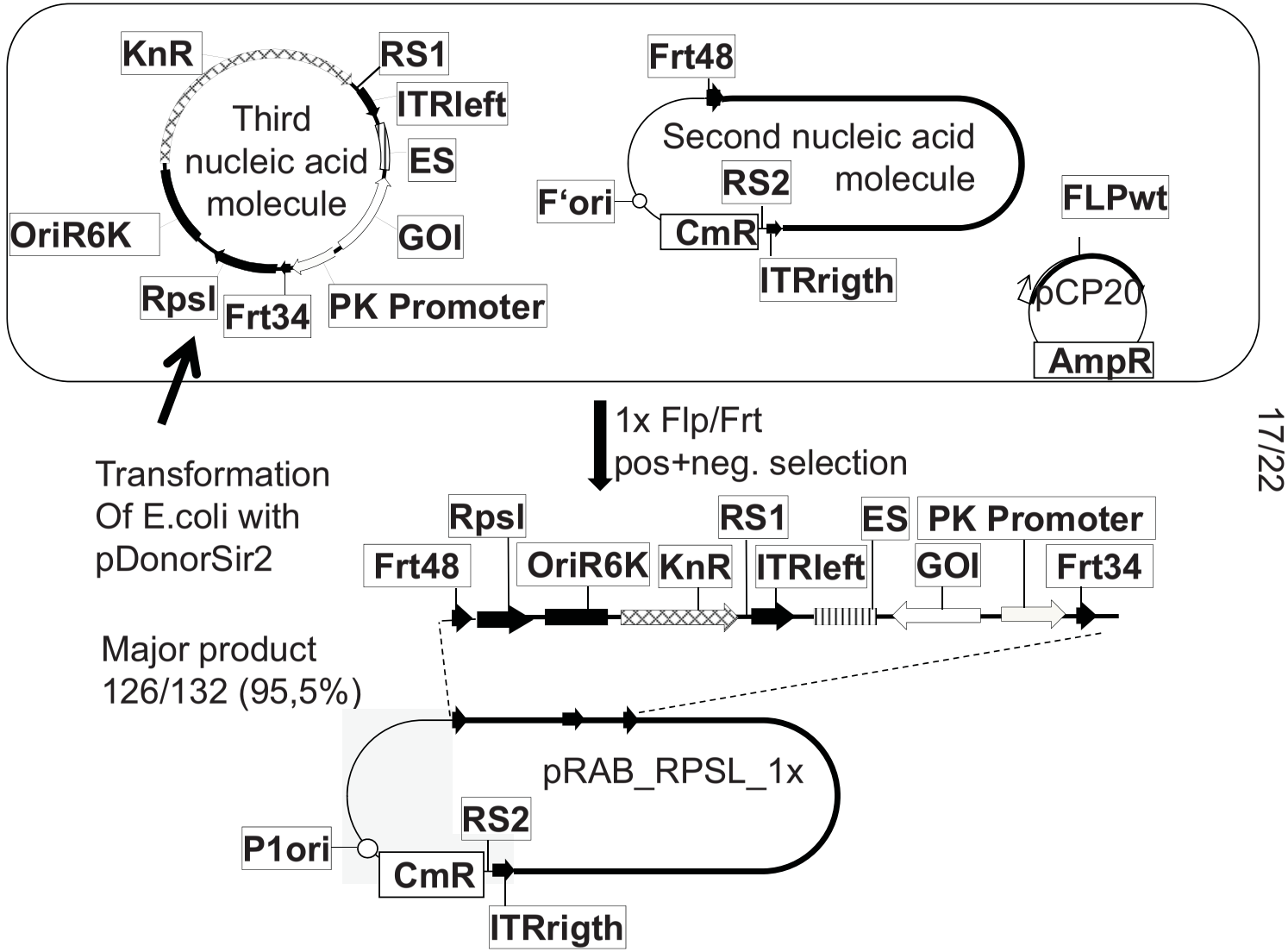

KnR
RS1
ITRleft
Third
nucleic acid
molecule
ES
OriR6K
GOI
RpsI
Frt34
PK Promoter
Frt48
Second nucleic acid
molecule
RS2
F'ori
CmR
ITRrigth
FLPwt
pCP20
AmpR
Transformation
Of E.coli with
pDonorSir2
1x Flp/Frt
pos+neg. selection
RpsI
RS1
ES
PK Promoter
Frt48
OriR6K
KnR
ITRleft
GOI
Frt34
Major product
126/132 (95,5%)
pRAB_RPSL_1x
RS2
P1ori
CmR
ITRrigth

Fig. 3B

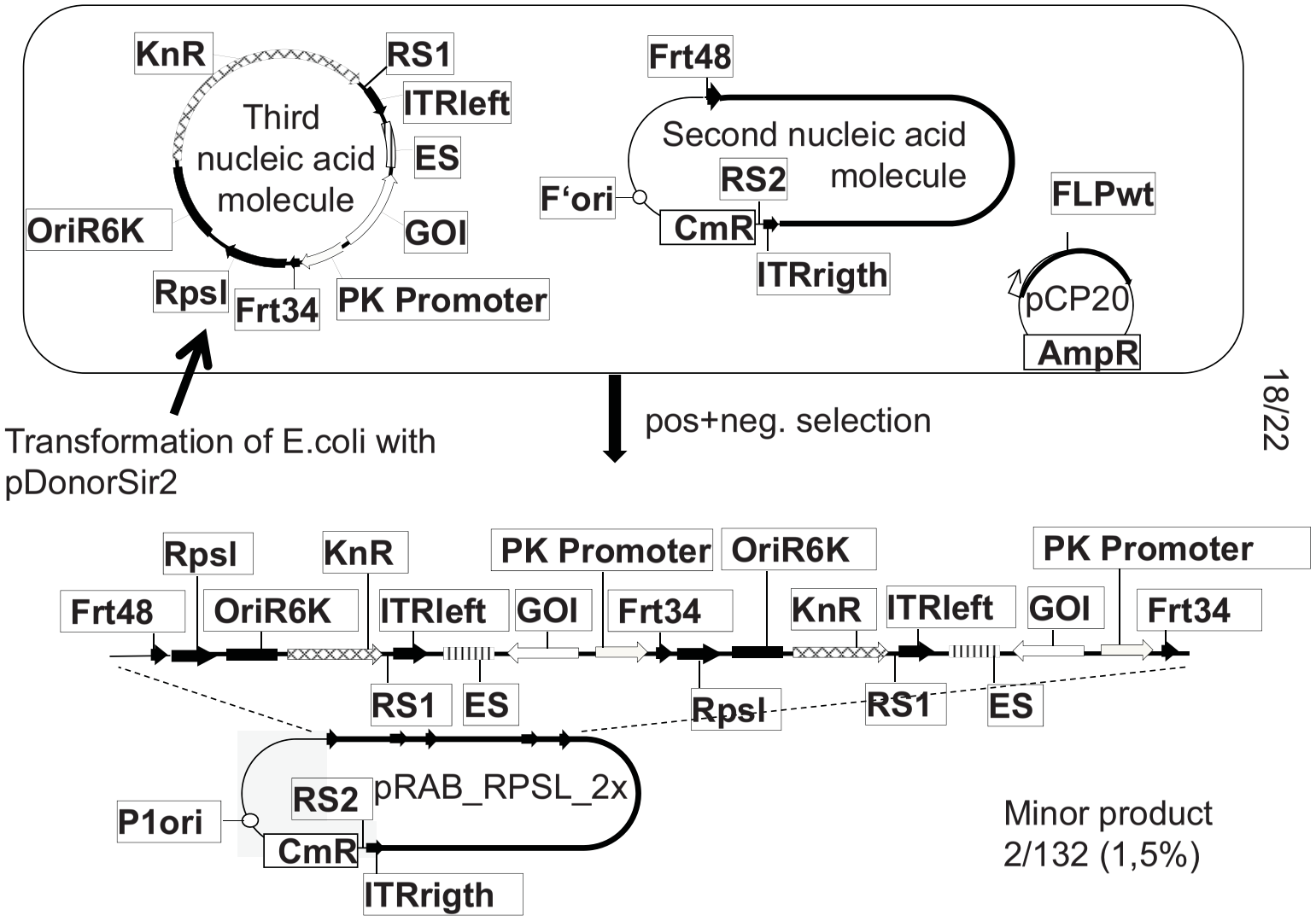
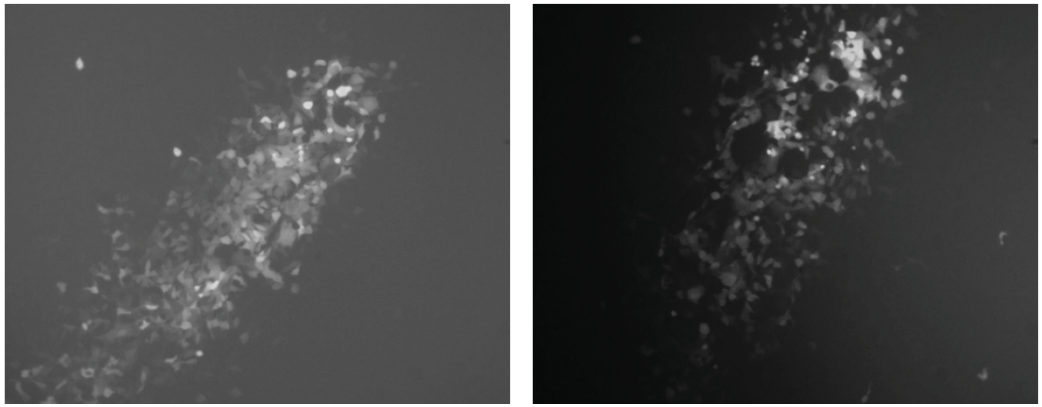

KnR
RS1
ITRleft
Third nucleic acid molecule
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GOI
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Second nucleic acid molecule
RS2
F'ori
CmR
ITRrigth
FLPwt
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AmpR
Transformation of E.coli with pDonorSir2
pos+neg. selection
RpsI
KnR
PK Promoter
OriR6K
PK Promoter
Frt48
OriR6K
ITRleft
GOI
Frt34
KnR
ITRleft
GOI
Frt34
RS1
ES
RpsI
RS1
ES
pRAB_RPSL_2x
RS2
P1ori
CmR
ITRrigth
Minor product
2/132 (1,5%)

Fig. 4



GFP expressing adenovirus vectors obtained after direct transfection of linearized forms of the first and the second nucleic acid in 293 cells expressing the FLP recombinase.

Fig. 5

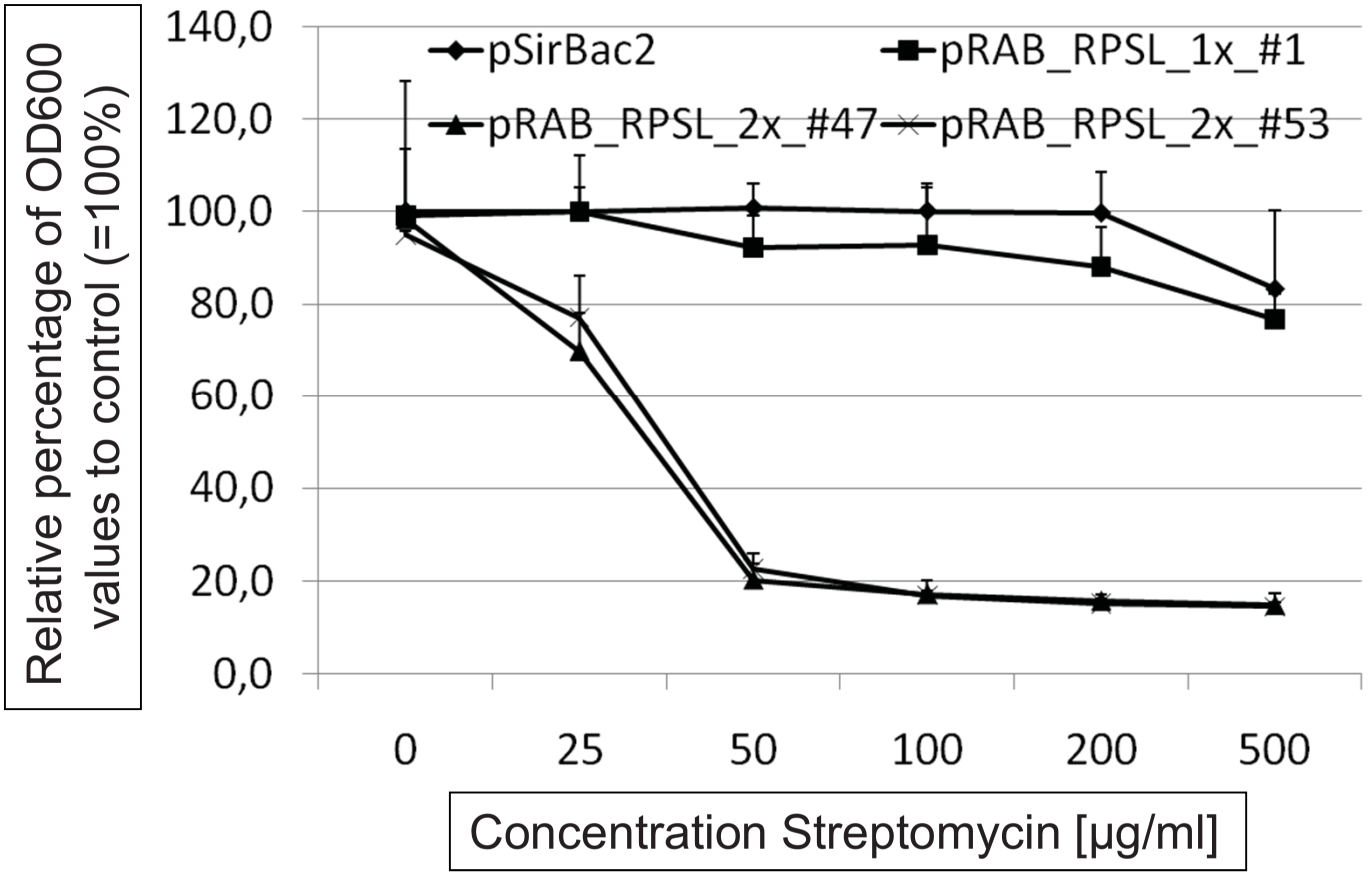

Relative percentage of OD600 values to control (=100%)
140,0
120,0
100,0
80,0
60,0
40,0
20,0
0,0
pSirBac2
pRAB_RPSL_1x_#1
pRAB_RPSL_2x_#47
pRAB_RPSL_2x_#53
0
25
50
100
200
500
Concentration Streptomycin [µg/ml]

Fig. 6

Predicted synergy matrix
(in the presence of kanamycin as additional maker)

Counter-selection marker	1st Antibiotic: Chloram-phenicol	Tetracycline	Beta-lactam antibiotics
rpsL	+	+	+
galK	0	+	+
sacB	0	+	0

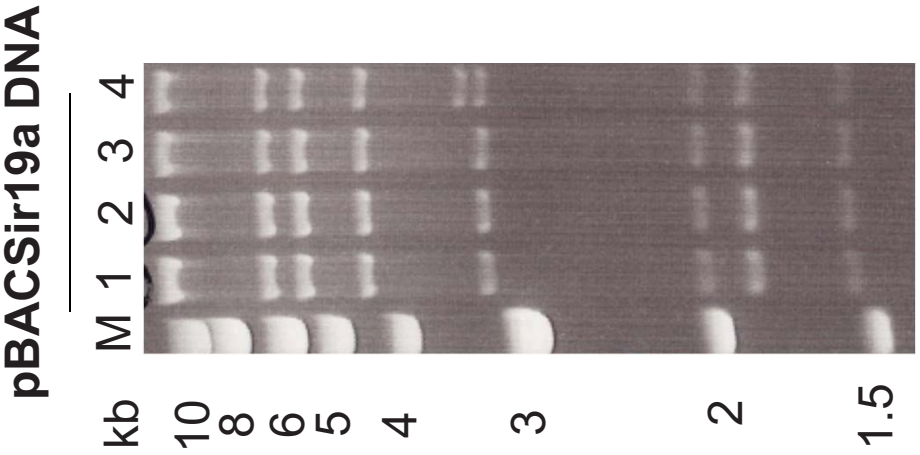


Fig. 7