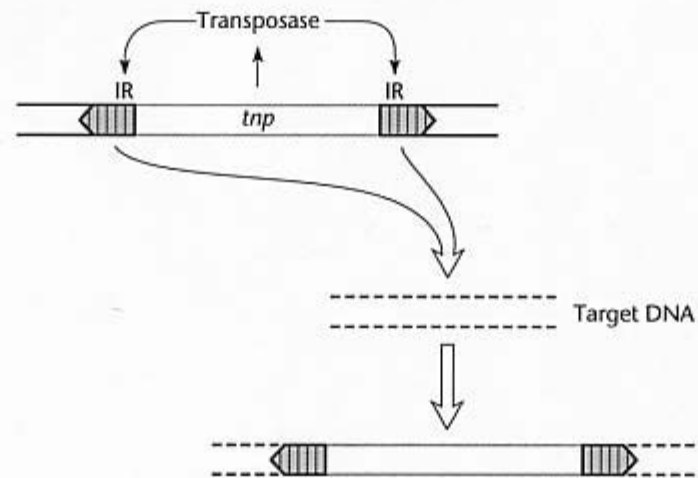


Figure 9.4

## A IS element



## B Composite: 2 IS + gene A

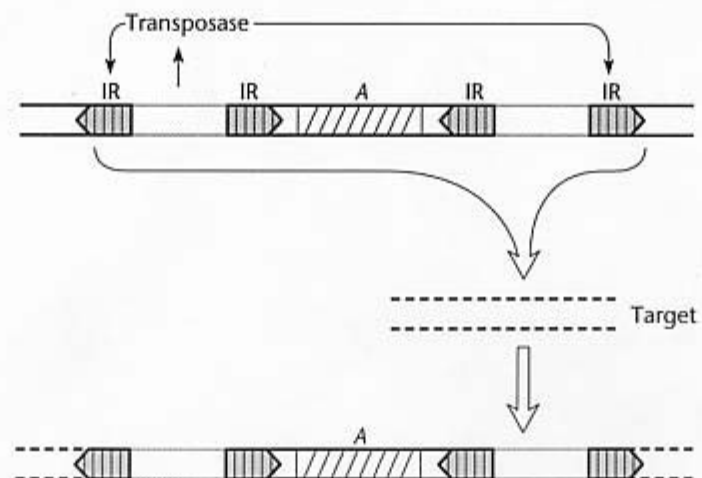


Figure 9.5

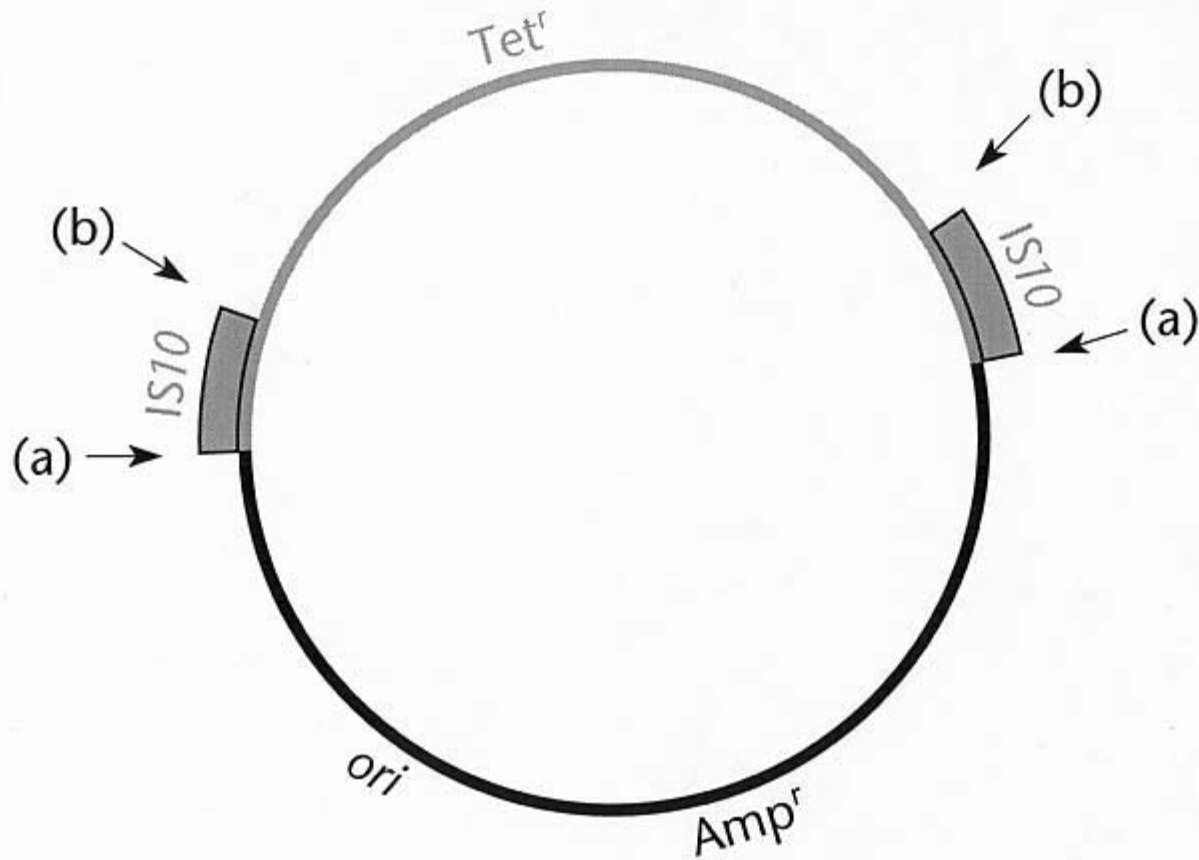
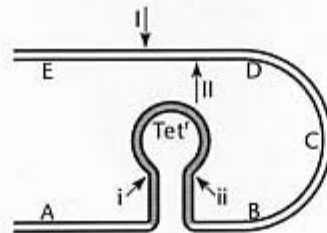
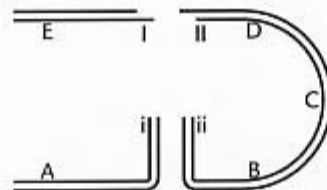




Figure 9.6

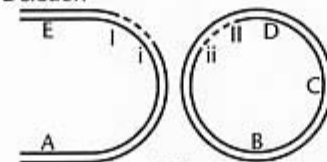


- ① Double-strand breaks at inside ends (i and ii) of transposon Tn10
- ② Staggered break (I and II) in target DNA



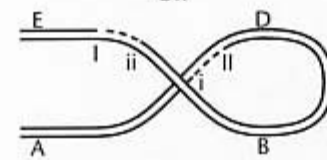
- ③ Tet' gene is destroyed

Deletion



- ④ Ends I and i and ends II and ii are joined

OR



- ⑤ Ends I and ii and ends II and i are joined

Inversion



Figure 9.7

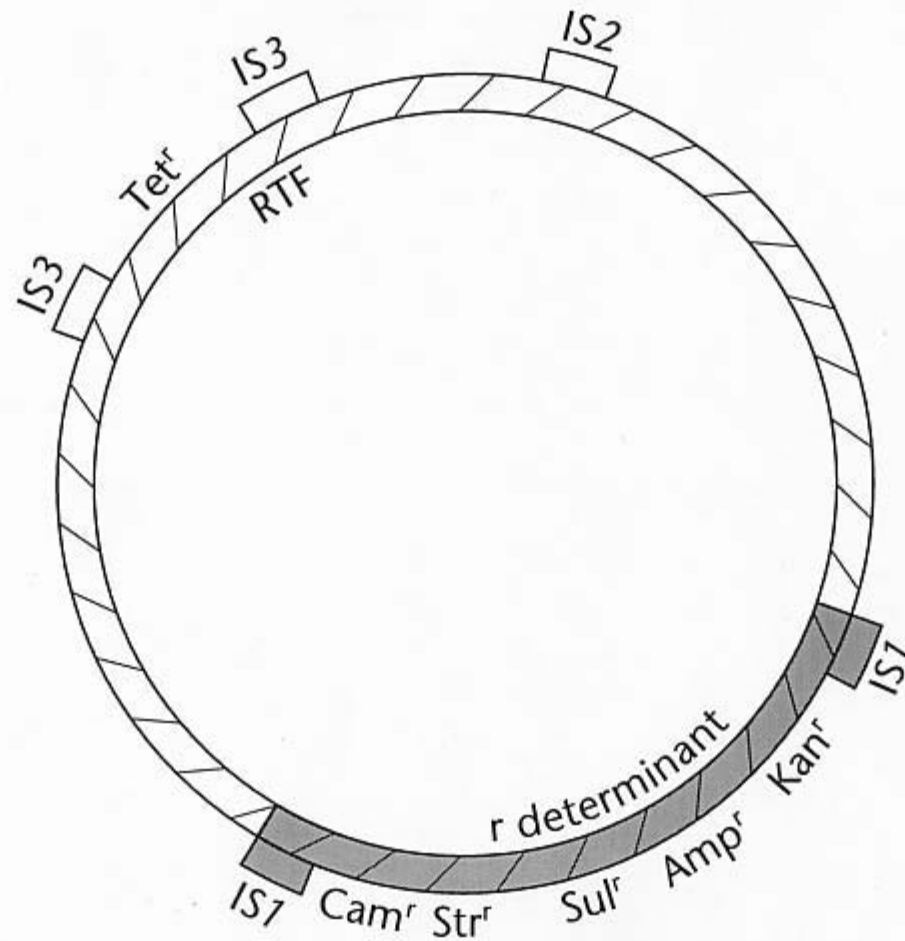
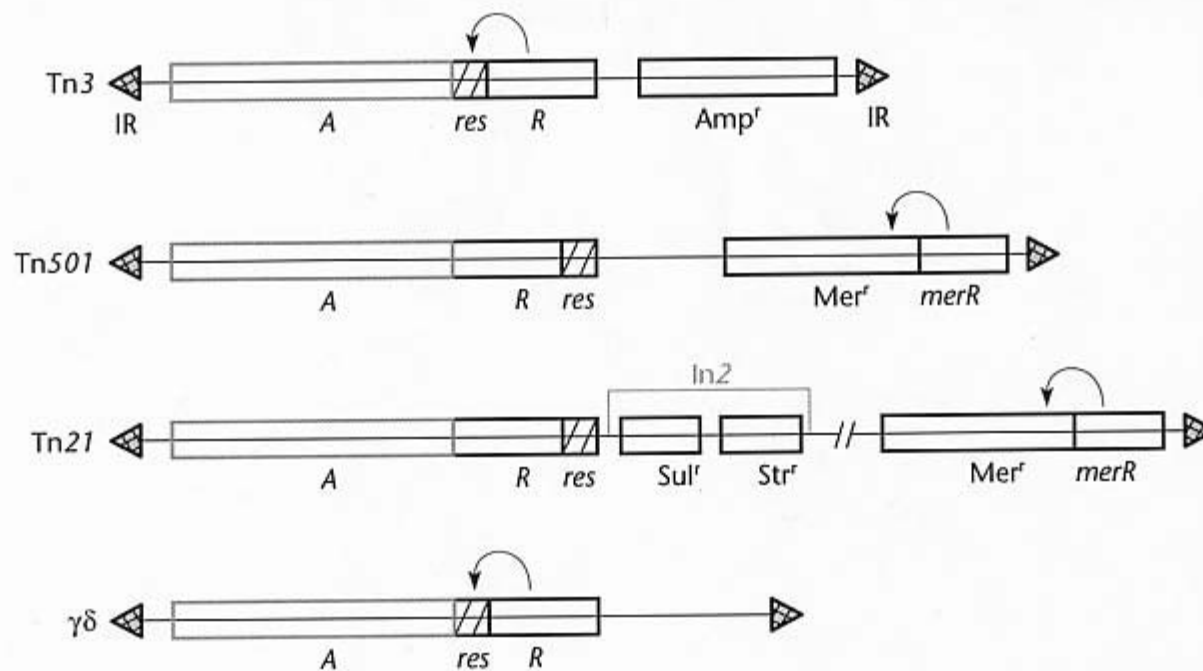


Figure 9.8



- ◄ ◄ Terminal inverted repeats
- A Transposase
- R Resolvase and repressor of *A* and *R* transcription
- res* Recombination site
- merR* Regulator of *Mer<sup>r</sup>* and transposase
- Mer<sup>r</sup>* Mercury resistance
- Amp<sup>r</sup>* Ampicillin resistance
- IR Inverted repeat



Figure 9.9

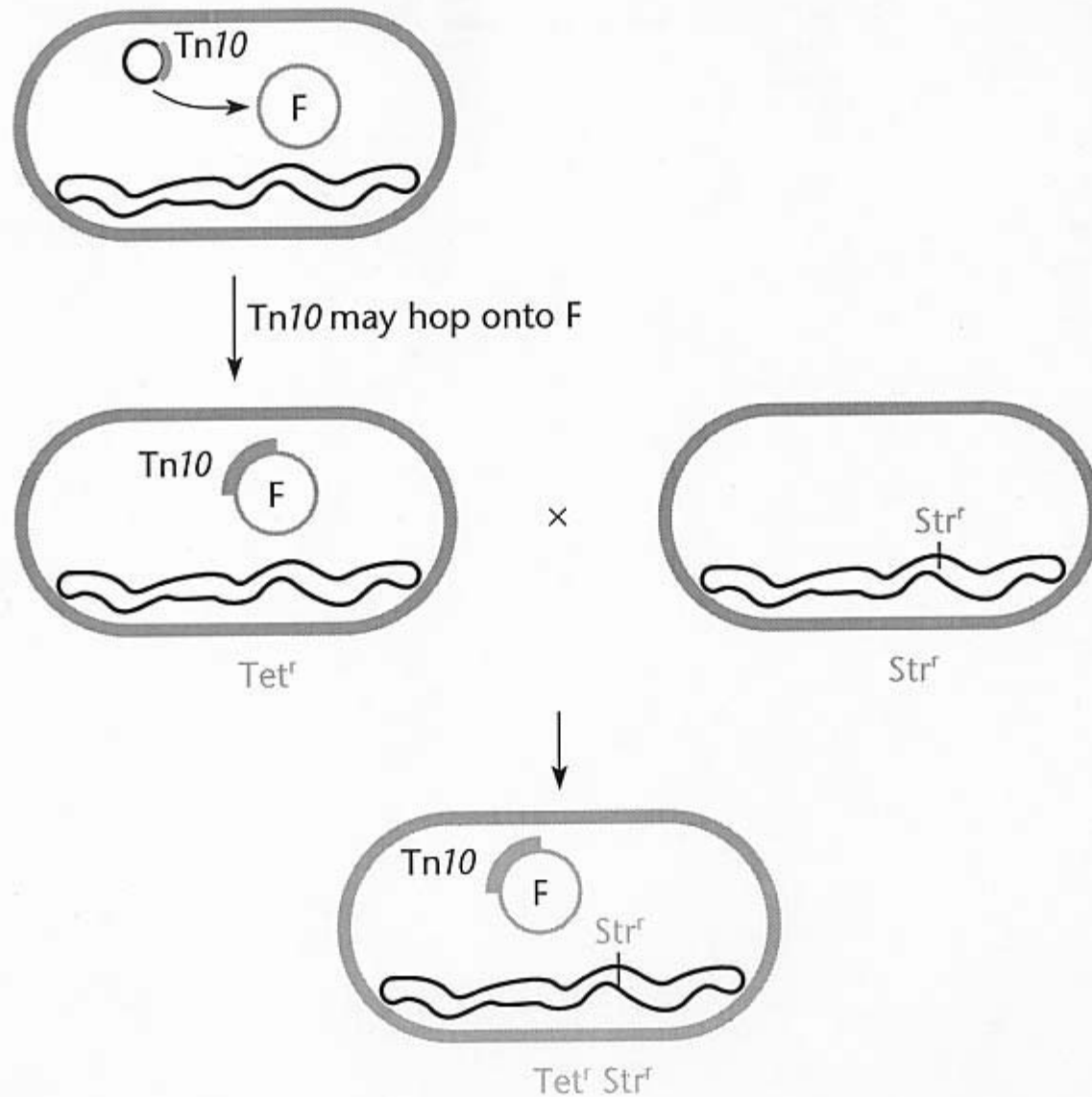
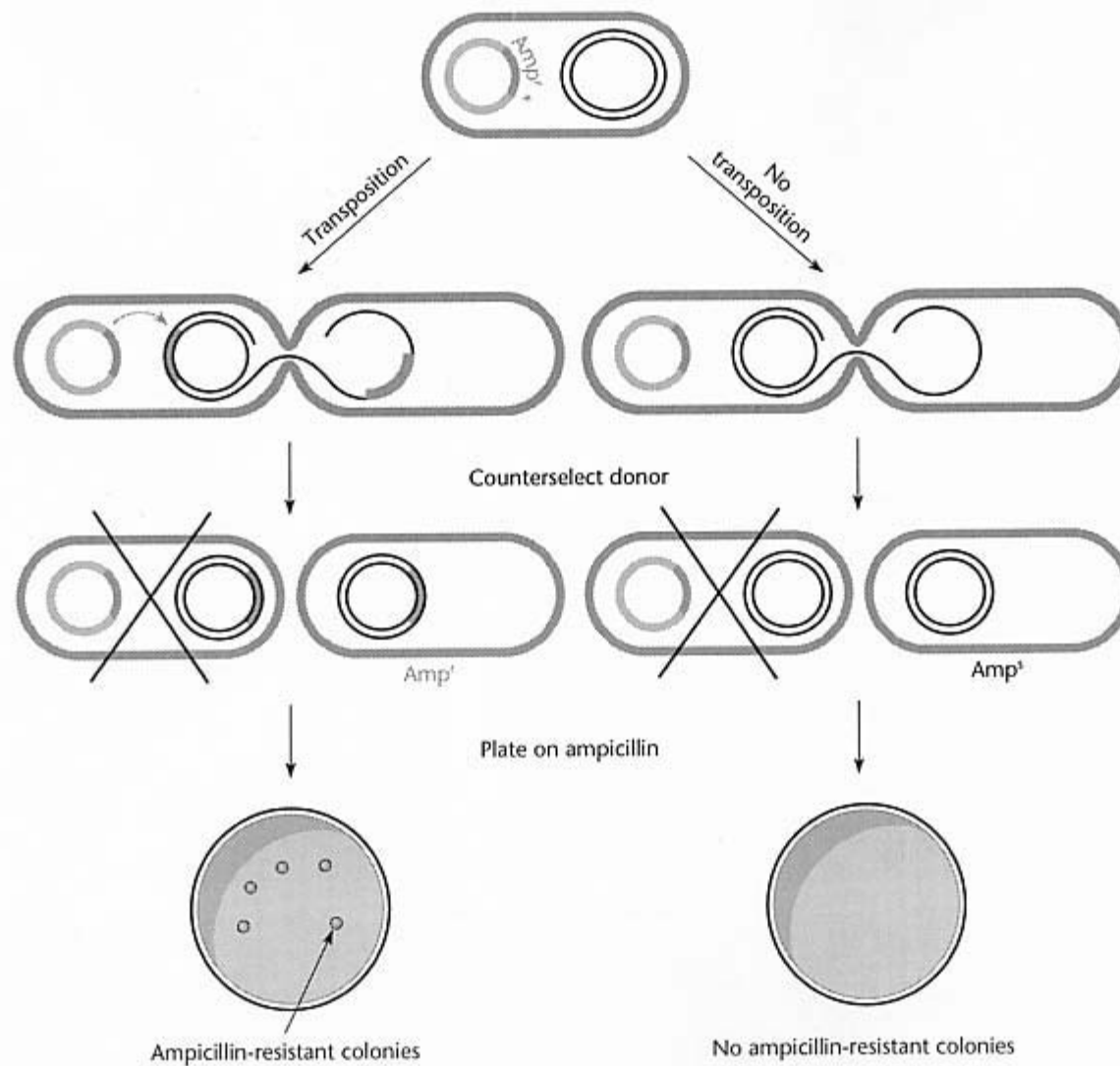




Figure 9.10





**Figure 9.11**

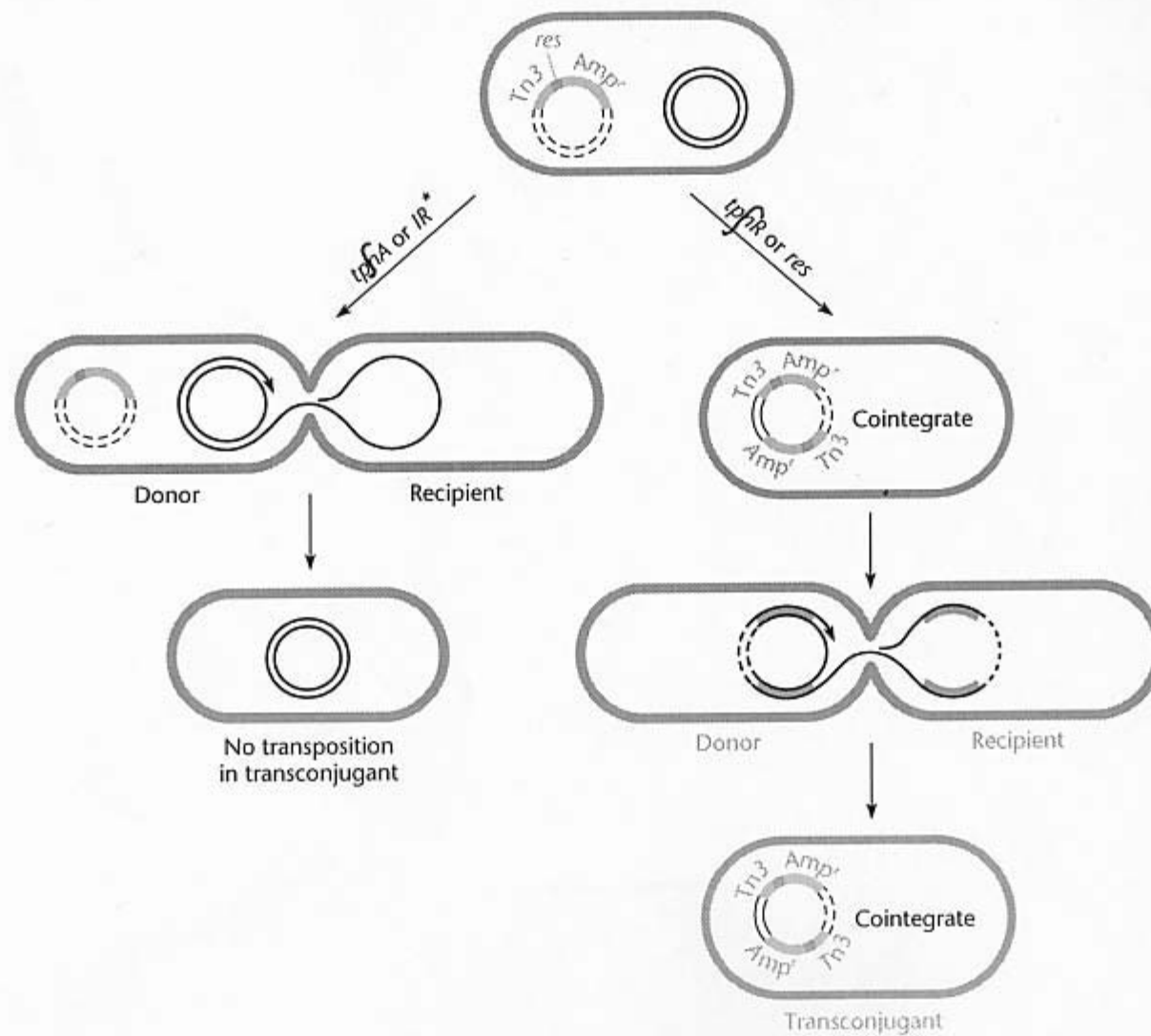
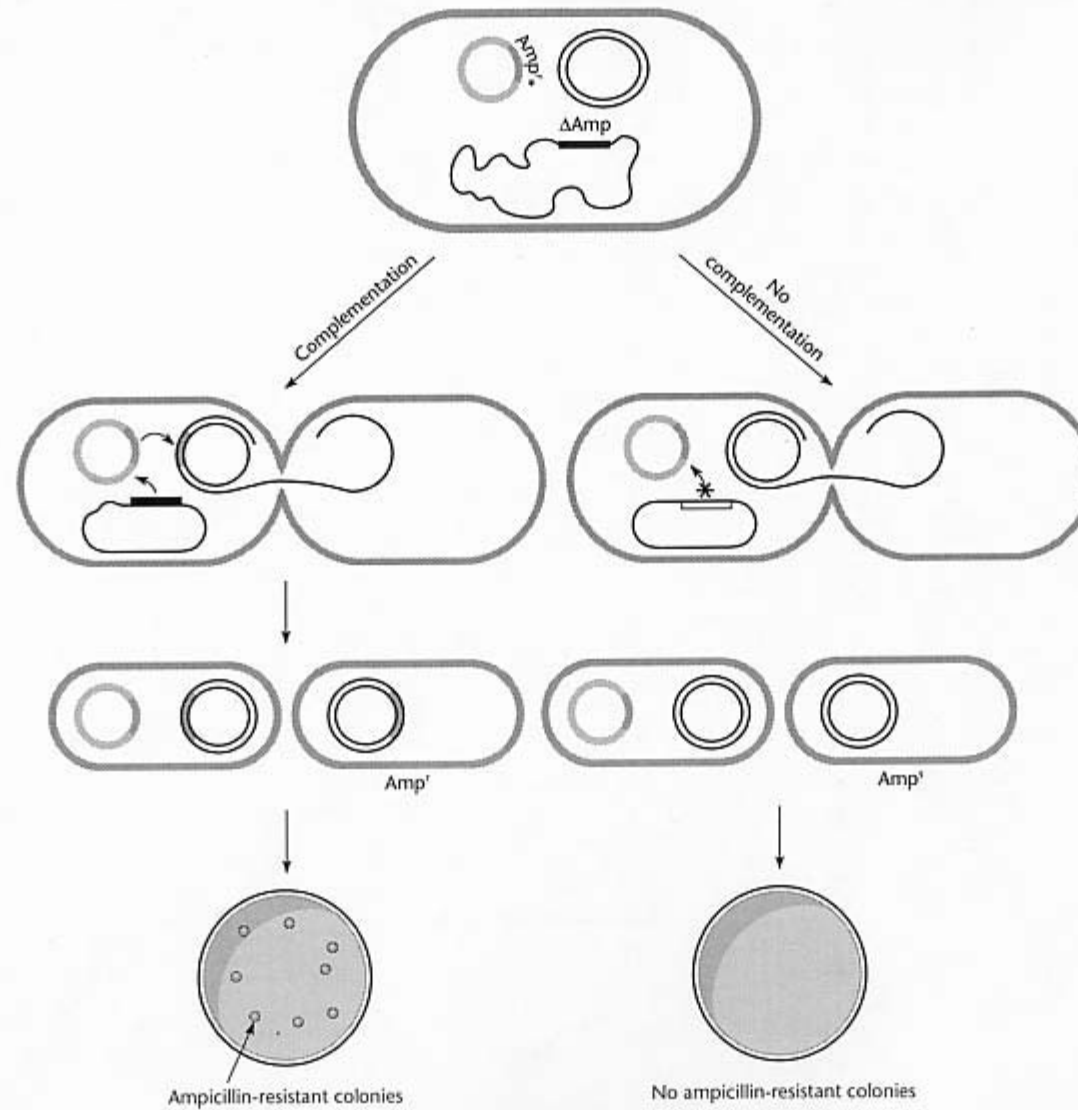






Figure 9.12





## Figure 9.13

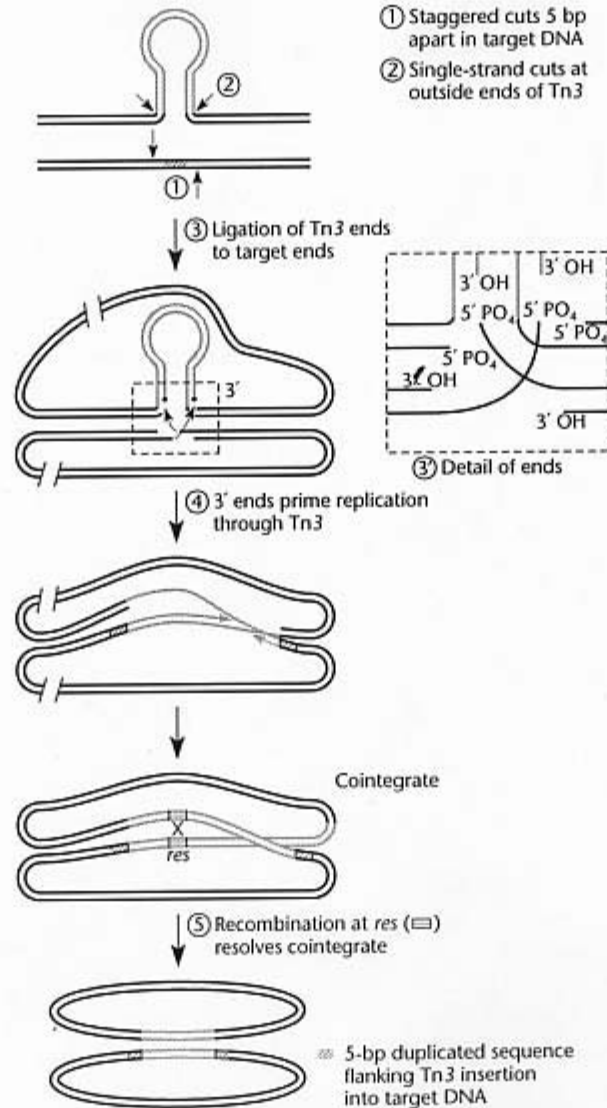
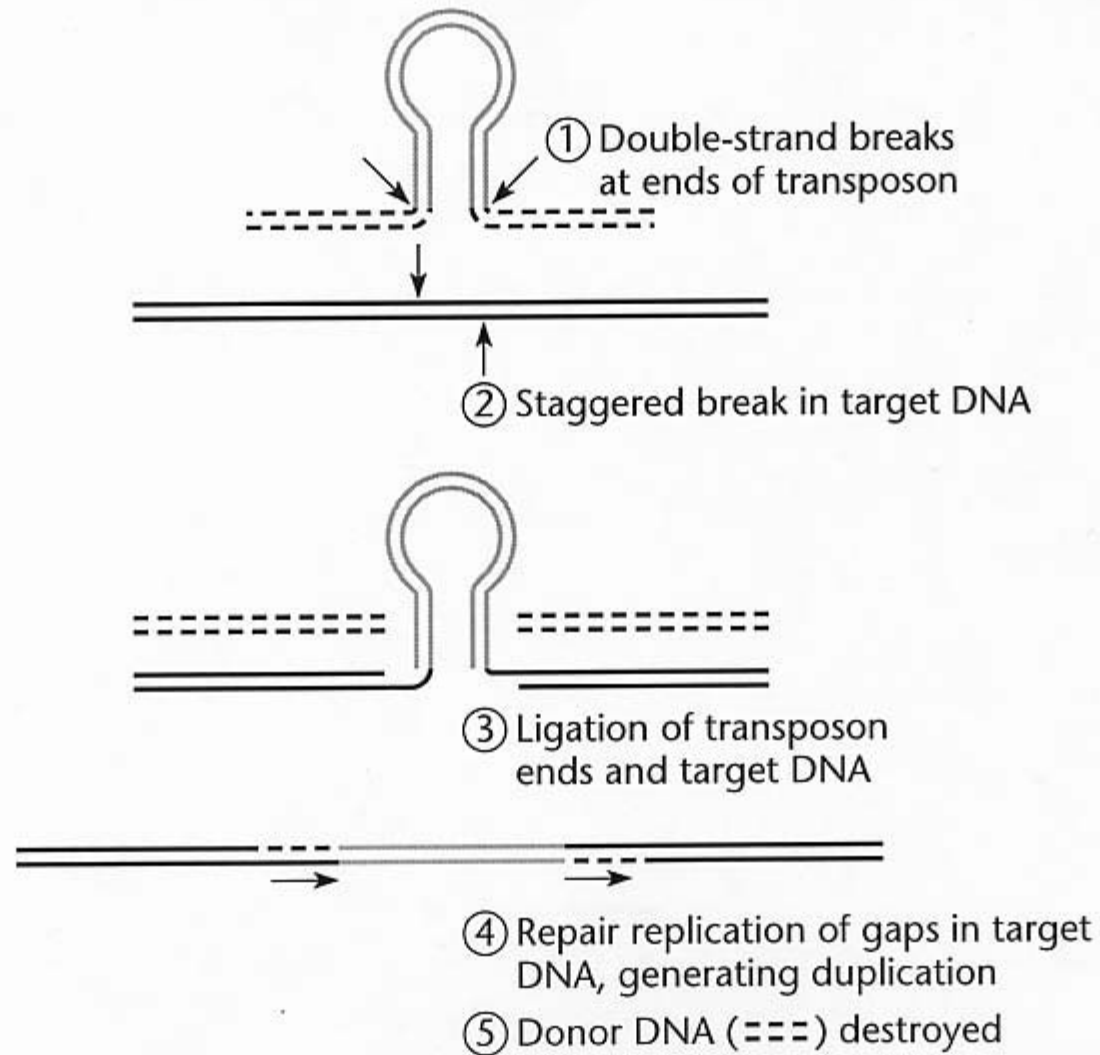


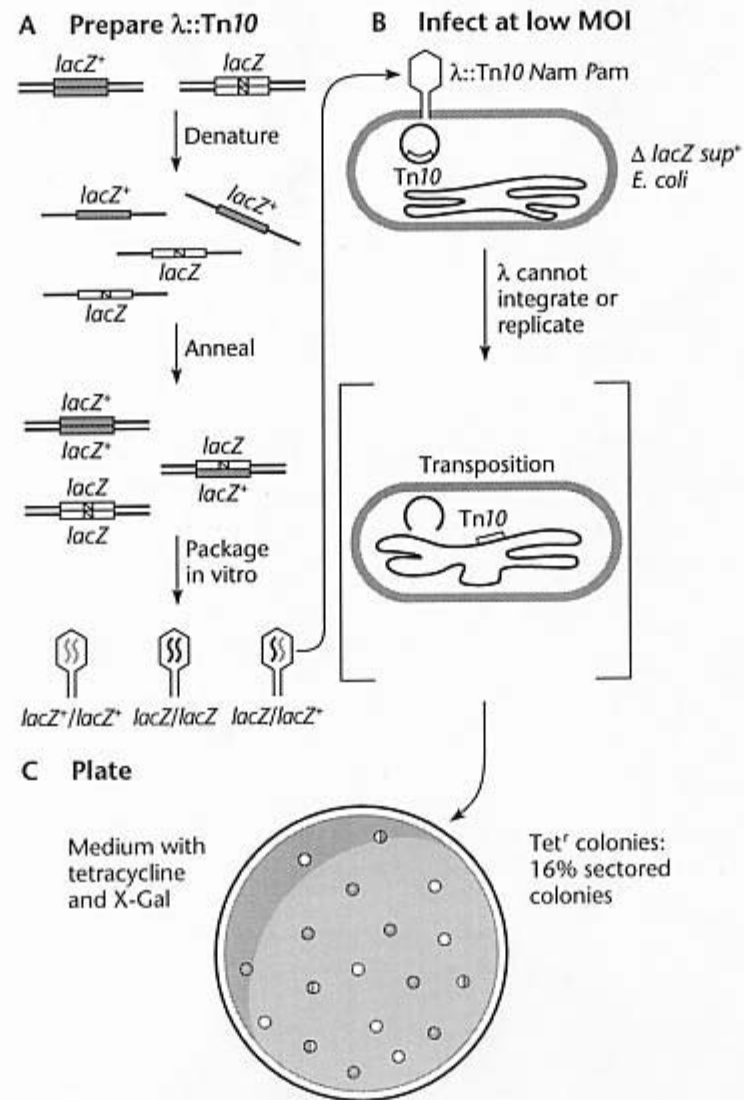


Figure 9.14





## Figure 9.15





### Figure 9.16

