

**Ram Balak Mahto**  
 Guest faculty  
 Zoology department  
 v.s.j college Rajnagar Madhubani  
 Class B.Sc 3rd yr. Paper 6, group-A 7908055676

### CLONING VECTORS P-2

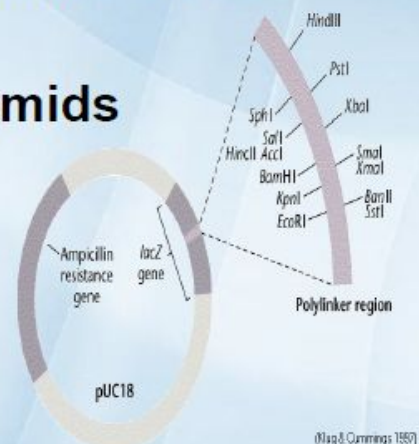
<b>TABLE 4.2 Copy numbers of some plasmids</b>	
<b>Plasmid</b>	<b>Approximate copy number</b>
F	1
P1 prophage	1
RK2	4–7 (in <i>E. coli</i> )
pBR322	16
pUC18	~30–50
pIJ101	40–300

#### PLASMID VECTORS

Plasmid vectors are used to clone DNA ranging in size from several base pairs to several thousands of base pairs (100bp -10kb).

#### Features of many modern Plasmids

- Small size
- Origin of replication
- Multiple cloning site (MCS)
- Selectable marker genes
- Some are expression vectors and have sequences that allow RNA polymerase to transcribe genes
- DNA sequencing primers

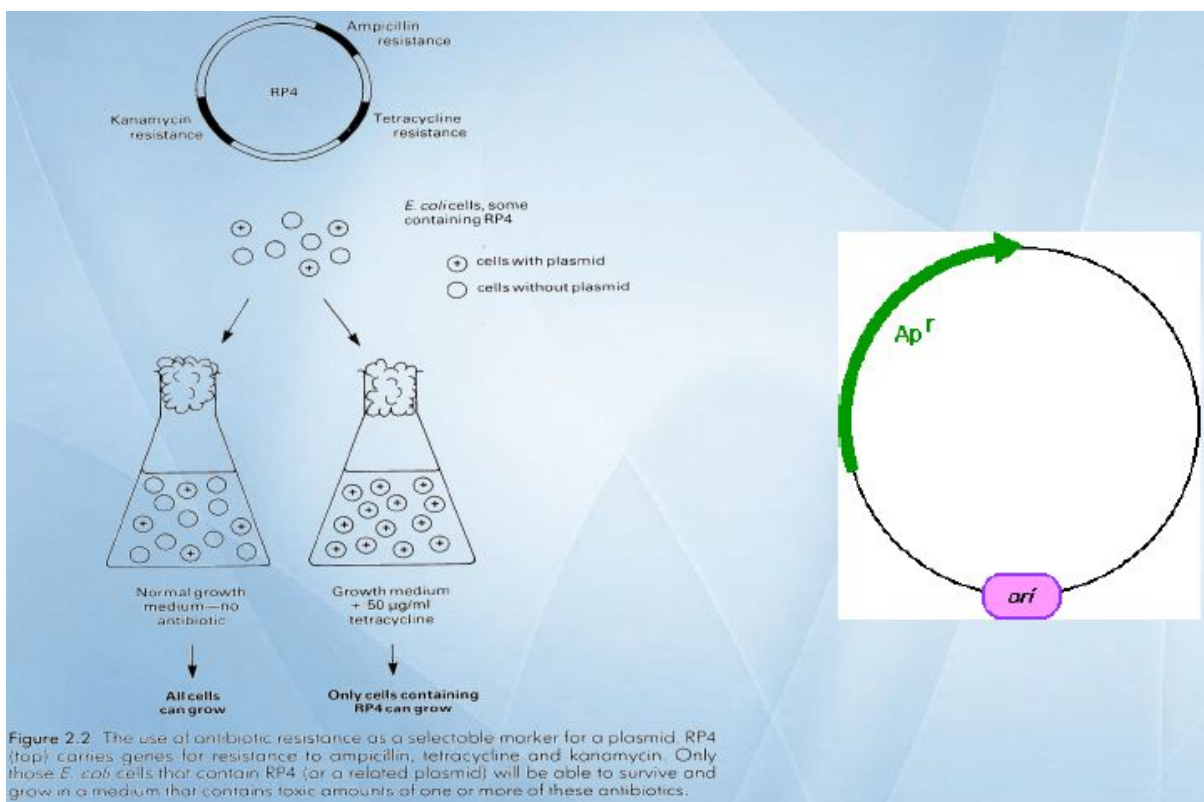


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## SELECTIVE MARKER



## MULTIPLE CLONING SITE

