

Fig. 3 Physical map of the colE1 genome constructed by the cleavages with $R \cdot EcoRI$, $R \cdot HaeII$ and $R \cdot HaeIII$. The inner and outer rings show HaeII and HaeIII fragments, respectively. The *Eco*RI cleavage site was designated the zero point, and each cleavage site was numbered in the clockwise direction (circled numbers). The map distance from the zero point is shown as the fraction of the length of colE1 DNA in the same direction. Heavy line indicates the region carried by pML21.

To determine the positions of HaeIII-B and -F in HaeII-A, the location of the EcoRI site in HaeIII fragments and the constituent HaeIII fragments of pML21 were analysed. The electropherogram of combined digests of colE1 DNA with $\mathbf{R} \cdot EcoRI$ and $\mathbf{R} \cdot HaeIII$ indicates that HaeIII-B was split with **R** · *Eco***RI** into two fragments, *Eco***RI**-A · *Hae***III**-B1(11.4 %) and EcoRI-A · HaeIII-B2 (5.9%) (I and II in Fig. 1e). Digestion of the mini-colE1 segment of pML21 with R · HaeIII yielded EcoRI-A HaeIII-B2, HaeIII-E, -F, -G, -H, -I, -J, -K, -L, -N and two new fragments "Y" and "Z" (Fig. 1g). Thus it was concluded that EcoRI-A · HaeIII-B2 and HaeIII-F were within EcoRI-A · HaeII-A2. The appearance of the two new fragments indicates that non-colE1 DNA in the mini-colE1 segment of pML21 contains one HaeIII site.

We can usefully summarise all the foregoing data in a single cleavage map of the colE1 genome, incorporating the various cleavage sites and molecular weight estimates of the fragments (Fig. 3). The EcoRI site was designated the zero point and measurement of the map distance as the fraction of the length of colE1 DNA was made in the direction A B D F C E of HaeII fragments from this point. According to this expression, pML21 carries the region 0.51 to 1.0. Earlier work indicates that replication initiates at 18% distant from the EcoRI site and proceeds towards the distal EcoRI site⁴⁻⁶. The replication origin of colE1 is present in pML21 (ref. 7). Therefore, the origin and direction of DNA replication can be deduced to be 0.82 and anticlockwise on the map in Fig. 3.

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Corrigendum

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Errata

In the article "Reactions involving singlet oxygen anion" by W. H. Koppenol (Nature, 262, 420; 1976) for 'effects', page 420, paragraph 1, line 6, read 'involvement'. Also, page 421, line 29, insert 'quantitatively' between 'reacts' and 'with'.

In the article "New cranium of Homo eructus from Lake Ndutu, Tanzania" by R. J. Clarke (Nature, 262, 485; 1976) the following corrections should be made. In the first paragraph on page 485 humanoid should read hominid. The semicolon in the third line of the second paragraph on page 486 should be replaced by a comma and the last word in the same line should be 'lacking'. The last sentence in the same paragraph should read 'In addition, there are the isolated right tympanic plate and both isolated petrous temporals'. There is no scale on Fig. 1: the distance from a to O is 12 cm.

In the article "RNA polymerase specificity and the control of growth" by A. Travers (Nature, 263, 641; 1976) the following corrections should be made on page 643: Paragraph 3, the sentence beginning in line 16 should read . . . addition of T7 DNA results in a reduction of T2 RNA synthesis and a stimulation . . .'; and the sentence beginning in line 28 should read '... the relative competition of T2 RNA and rRNA synthesis is virtually independent of the nature of the competing template.'; and in paragraph 6, the second sentence should read 'In two instances where stable RNA synthesis is shut off in vivo, ppGpp accumulation and T4 infection . . .'

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