レプトスピラ リボゾームRNA遺伝子の構成

福長将仁，三渕一二

Journal of Bacteriology, 171 (11) 5763－7 1989

Unique organization of *Leptospira interrogans* rRNA genes.

Masahito FUKUNAGA, Ichiji MIFUCHI

ABSTRACT We cloned *Sau*3AI fragments containing the rRNA genes for *Leptospira interrogans* serovar *canicola* strain Moulton in the *canicola* strain Moulton in the *Bam*HI site of lambda EMBL3 bacteriophage DNA. Physical maps of the fragments were constructed, and the locations of the rRNA genes were determined by Southern blot hybridization and S1 protection. Each fragment of the 23S or the 16S rRNA gene contained at least one copy of the 23S or the 16S sequence. Genomic hybridization showed that there were two genes for the 23S rRNA and the 16S rRNA but only one gene for the 5S rRNA on the chromosome of *L. interrogans*. The results revealed the important fact that each rRNA gene is located far from the other rRNA genes. Our findings, accordingly, also suggest that these rRNA genes are expressed independently in this organism.

抄録 細菌のリボゾームRNA遺伝子は23Sおよび5Sの3種から成り，それらは染色体上に並んで存在し，まとめて転写されたのちにそれぞれのRNAに分割される。しかしながらレプトスピラ・モルトン株ではこれらの遺伝子がそれぞれ染色体上に教在し，これまでに例の無いめづらしい構成を持つ事を明らかにした。