

1962; Geiduschek et al., 1966), but addition of the T4 gene 55 product allows E. coli RNA polymerase to transcribe late regions of T4-DNA in vitro (Snyder and Geiduschek, 1968). The informations obtained from these in vitro studies support our considerations on the enzyme in the phage DNA transcription based on in vivo experimental results. It has also been demonstrated by electrophoresis on polyacrylamide gel that E. coli RNA polymerase is modified by the infection with phage T4, although the modification has not been demonstrated by immunochemical methods (Walter et al., 1968). The modified enzyme is considered to conserve the structural characteristic which interacts with SV and probably has connection with the initiation of RNA polymerization.

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ADDENDUM

After this manuscript had been submitted to the editor we heard from Dr. Geiduschek that two papers, one by Dr. Haselkorn and the other by Dr. Geiduschek, were accepted in *Nature* in which using rifamycin an essentially identical conclusion was made.