February 2, 1965

Dr. George Streisinger Institute of Molecular Biology University of Oregon Eugene, Oregon

Dear George:

Gerard Buttin and I have been making some attempts to study DNA synthesis in coli cells rendered permeable to triphosphates. We would like to work with T-phage-infected cells but are encountering lots of trouble with the fragility of these cells when we harvest them about 10 minutes after infection. To some extent, this fragility may be due to lysis by lysozyme and we wondered whether the use of lysozyme-defective mutants might solve this problem for us. Do you have such T4 mutants that we could try for their usefulness in this system.

Dave Hogness had the impression that you had evidence for factors or enzymes induced by phage infection that sealed the leaks in coli membranes and walls produced by phage entry or attachment. If you have references to such work or specific suggestions on how to prevent excessive leakage in infected cells, I would appreciate your letting me know.

With best personal regards,

Sincerely,

Arthur hornberg

AK:es