November 27, 1962

Dr. Julian B. Fleischman
Institut Pasteur
Service de Physiologie Microbienne
25, Rue du Docteur Roux
Paris XV, France

Dear Julian,

I don't know why you should think that measuring DNA polymerase activity in crude coli extracts would be any easier following the incorporation of a ribonucleotide than in the more conventional way with four deoxynucleoside triphosphates. Doing it by ribonucleotide incorporation is apt to give high values since you might also measure the activity of RNA polymerase and the enzyme adding nucleotides onto acceptor RNA. As I gather it from the DNA polymerase people, measuring deoxynucleotide incorporation in crude extracts is reproducible and reasonably accurate. The conditions for the assay are described by Lehman et al. (JBC 233, 163, 1958). If your suggestion is based on the availability of labeled ribonucleoside triphosphates, I think you would be better off making some $dCTP^{32}$ or $dTTP^{32}$ and using that in a straighforward DNA polymerase assay. For the preparation of either of these you can use the chemical procedure described in the enclosed sheet, just substituting the appropriate deoxynucleoside.

Tell Mel that I'll write to him soon - I've been very busy trying to get myygraduate course for next quarter in shape. I'm enclosing also a copy of the paper I gave at Rutgers which you can pass around or distribute copies of for whatever it's worth.

Esther came back raving about Paris and especially you as a guide and "housemate". There's something about Paris that does wonders for everybody, since Esther just said "In spite of Palo Alto, I still miss Paris".

With best regards to all at the Institute.

Sincerely,

Paul Berg

PB:cm
Enclosures