

THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH

66TH STREET AND YORK AVENUE
NEW YORK 21, N.Y.

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Dear Dr. Lederberg:

I wonder whether it would be possible for me to obtain strains of K12 - I would like to use them to attempt to prepare mutants by the Pencil method - mutants connected with porphyrin synthesis.

I would rather start with a sexual organism if possible and that is why I have thought of your K12 strain. I am told however that there is the added complication of prophage. Do you have any K12 free of prophage? Or does that make any difference in growth?

For porphyrin mutants it would be ideal to start with a highly aerobic, rapidly respiring bacterium - on the assumption that the more actively respiring ones have more porphyrin enzymes. Does your K12 use up lots of O_2 under aerobic conditions? Could one use the

penicillin technique on some other actively aerobic
bacterium - other than B. coli?

I shall be grateful for any advice and
suggestions you may have.

Cordially
L. Granick