

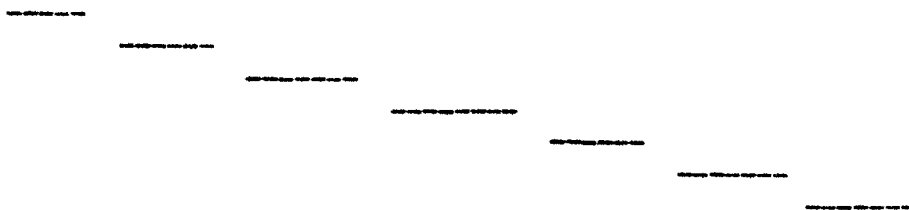
November 10, 1956

Dr. S. Spiegelman
Urbana, Ill.

Dear Sol:

Morton has checked through many of the mutants in more detail, both with ONPGase and allelic determinations. It turns out that W-3133 is a two-step mutant, i.e., one step past $Lac_{1a1} = Y-87$. It maps as a deletion against all the other Lac_1 mutants; from its phenotype, I would be suspicious that it overlaps part of the Lac cistron [a formulation that looks plausible, but is somewhat beyond our present data]. We don't know yet whether a two-point mutant would be distinguishable from a deletion by current procedures.

The map looks something like this now: (Don't take the sequence too seriously)



Our microscope is a Zeiss GF 595 with Neofluor objectives (except for 40x where the achromatic seems better) and III Z/6 condenser outfit. I am sure Kessel can tell you exactly the setup he sold us, and why.

Sincerely,

Joshua Lederberg