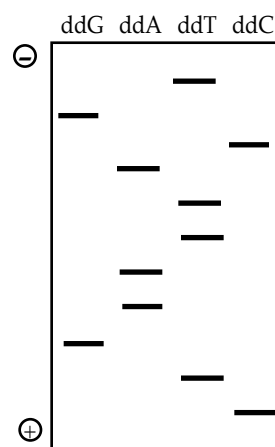


7.013 Solutions to: Applications of recombinant DNA technology



a) 5' CTGAATTACGT 3'

b) No, TA6's DNA sequence for gene K is different than that found on the note.

c) See above

d) TA1 and TA5. Their DNA samples at the gene L locus do not match the sample found on the bag.

e) The strategy is as follows:

You design the following two primers to PCR amplify position Z.



- f) i) 1: TA2
2: TA5
3: TA1
4: TA3 or TA6
5: TA4
6: TA3 or TA6

ii) TA3 must have committed this crime. Only TA6 and TA3 match the sample taken from the note. TA6 is no longer a suspect due to part a.