
name

Bacterial genetics

Quiz 3

1. What would the immediate and the far reaching effect be of deleting the N gene of phage Lambda when it infects E. coli?

genes beyond the left and right terminators would not be expressed
lytic phase cannot proceed
lysogeny is the only option

2. What would be the effect of expression the Lambda CI gene on a plasmid in an E. coli strain on infection with Lambda?

lysogeny would be the only option - the lytic genes would not be expressed because they would be repressed

3. What is the physical form of DNA in an M13 phage particle?

single stranded circular

4. Which phage has the loosest limitations of size of packages genome - Lambda or M13? Why?

M13 because it does not have a phage head of a limited size