



COC Biotechnology Program

Green Fluorescent Protein (GFP) Purification Post Lab

1. What three genes does the pGLO plasmid contain, what protein do these genes code for, and what is the function of each protein?
 - a.
 - b.
 - c.
2. Define the DNA region called a promoter.
3. Draw the four-step sequence in which GFP is expressed. Include the araC promoter, the GFP gene, RNA polymerase, and arabinose.
4. Using the above information, explain why the colonies on the LB/amp plate were white and why the LB/amp/ara colonies were green.
5. Explain the roles of the following buffers in chromatography:
 - a. binding buffer:
 - b. wash buffer:
 - c. elution buffer: