

Lab Report 4

Experiment 12

This lab report will be informal. There should be no Abstract, Introduction, or Methods and Materials. The Results should include only the relevant figures and tables. No written narrative is necessary. The Discussion will be only a brief analysis of the data. The reports will be graded at 40 points: 20 points for data and 20 points for analysis.

This report covers experiment 12 (Southern Blot Analysis of Plasmids pRIT4501 and pRIT4502). In this experiment you cut your plasmids and chromosomal DNA with *EcoRI*, ran the fragments on a gel, and transferred the DNA to a nitrocellulose membrane to do a Southern blot. One team used pUC9 as the probe and the other used pPL608.

In this lab report you must explain the banding pattern of both probes with respect to the *EcoRI* restriction map that you previously constructed for each plasmid.

Required data elements are:

- photograph of the gel
- photograph of the pUC9 blot
- photograph of the pPL608 blot
- restriction map of PRIT4501 and pRIT4502