

## Lab Report Instructions

Write up a complete lab report describing your experiments, results and conclusions. Your lab report should be at least 2 pages and no more than 5 pages. Lab report should be typed. Your lab report should include:

1. **Background section** – describes the purpose of the experiment. What was the purpose of the experiment? What is your hypothesis? What results do you expect to see? For the ELISA assay, explain which animal serum you expect to have the most antibody binding. For the western blot, describe which samples you expect to have the most reactivity. This section should not include any data or results, just your hypothesis and your expectations.
2. **Methods section** – describes what methods you used. How was the experiment set up? How did you carry out your experiment? For the ELISA assay, you should describe how the plate was arranged. Which samples were added to which wells? What is the purpose of each step of the procedure? Be sure to describe the serial dilution. For the Western blot, explain which samples were loaded to each lane? What is the purpose of each step of the procedure? You do not need to include the level of detail such as how much you pipetted into a well. This section should not include data or results.
3. **Data section** – includes your data and results. Data may be in the form of tables, graphs or images. For the ELISA assay, your data is a table showing which wells had more antibody binding. Be sure to show data for both the blue color and the yellow color after you added HCl. You may include your original data table or enter your data into the computer. For the Western blot, your data will be a drawing or photograph of the blot.
4. **Analysis and conclusion section** – what does your data mean? What were you able to learn from this experiment? What conclusions can you draw from your data? Does your data match your hypothesis? If not, why might that be?