Mariah Hall

Bio 125- Tuesday lab

12/4/2023

# Laboratory report 15 ELISA

## Purpose:

The purpose of this lab is to learn about ELISA testing. We're able to do our own testing. We learn about how and why this testing is done.

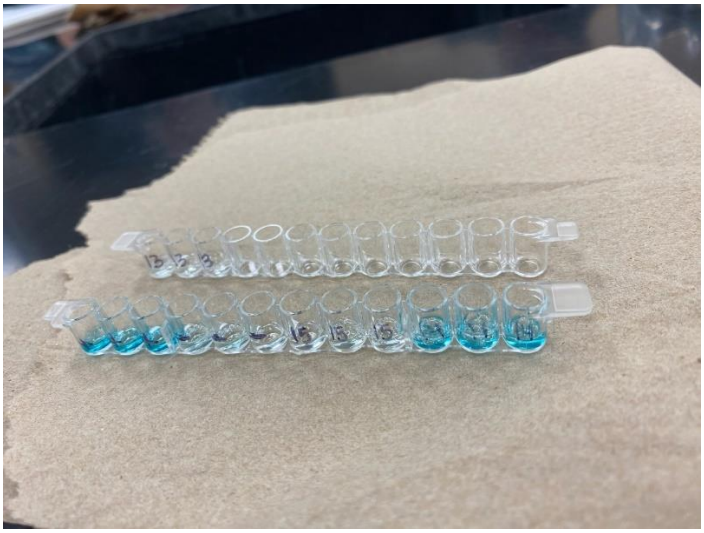
## Procedure:

1. Label the tubes to identify the samples being tested.
2. Label your 12-well strip. The first 3 wells with a (+) for the controls and the next 3 wells with a (-) for the negative controls, label the remainder wells to identify the samples being tested 3 wells each.
3. Use a fresh pipet tip to transfer 50 of purified AG into each of the 12 wells of the microplate.
4. Wait 5 minutes for the antigen to bind to the plastic wells.
5. Wash
6. Repeat wash step 5
7. Use a fresh pipet tip to transfer 50 of the positive control into the three + wells.
8. Use a fresh pipet to transfer 50 of the negative control into the three – wells.
9. Transfer 50 of each of your team's serum samples into each of the appropriately initialed three wells, using a fresh pipet tip for each serum sample.
10. Wait 5 mins for the antibodies to bind to their targets.
11. Wash the unbound primary antibody out of the wells by repeating all of the wash step 5 TWO times.
12. Use a fresh pipet tip to transfer 50 of secondary antibody into each of the 12 wells.
13. Wait 5 minuets for the antibodies to bind to their targets.
14. Wash the unbound secondary antibody out of the wells by repeating wash step 5 THREE times.
15. Use a fresh pipet tip to transfer 50 of the enzyme substrates into each of the 12 wells.
16. Wait 5 minutes. Observe and record the results.

## Results:

-We noticed a slight positive on #15

-We got a positive on #14



**Discussion:**

I can't believe this is our last lab! This lab was nice to do. The instructions were very clear and to the point. The only part that was redundant was the repeat washes. Overall, this was a very interesting lab.

**Conclusion:**

-ELISA stands for enzyme-linked immunoassay.

-This test detects presence of antibodies.

-Antibodies are proteins in your body produced in response to harmful antigens.

-ELISA can help with identifying many different health conditions.