

Brenda Javier
Lab 15- ELISA
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Purpose: The purpose for this experiment was to see the reaction between antigen, secondary antibody, and enzyme substrate reaction when put together.

Procedure: In laboratory 15 ELISA, we started off by labeling the yellow tubes (if necessary) to identify the samples being tested. We then labeled the 12-well strips. On each strip we labeled the first three wells with a "+" for the positive controls and the next three wells with a "-" for the negative controls and the remaining wells we label them sample A and sample B to identify the samples being tested (three wells each). We used a fresh pipet tip to transfer 50 ul of purified antigen (AG) into each of the 12 wells of the microplate strips. We waited 5 minutes for the antigen to bind to the plastic wells. We then washed the 12 wells and made sure it has no antigen in them by tipping the microplate strip upside down onto the paper towels and gently tap on the strip a few times upside down. Make sure to avoid splashing sample back into wells. Then we use the transfer pipet to fill each well with wash buffer taking care not to spill over into neighboring wells. After that use a new paper towel to tip the strip upside down onto the paper towels. Then we repeat the wash step one more time. We use a fresh pipet to transfer 50 ul of the positive control (+) into the three "+" wells. Use a fresh pipet to transfer 50 ul of the negative control (-) into the three "-" wells. Transfer the 50 ul of each of your team's serum samples into each of the appropriately initialed three wells, using a fresh pipet for each serum sample. Wait 5 minutes for the antibodies to bind to their targets. After that we wash the unbound primary antibody out of the wells by repeating all the washing steps two times. After washing the wells twice, we used a fresh pipet tip to transfer 50 ul of secondary antibody (SA) into each of the 12 wells of the microplate strips. We wait 5 minutes for the antibodies to bind to their targets. After, we wash the unbound secondary antibody out of the wells by repeating the wash steps three times. Use a fresh pipet tip to transfer 50 ul of enzyme substrate (SUB) into each of the 12 wells of the microplate strip. After this step we wait 5 minutes and record our results.

Results:



Discussion: In lab 15, I didn't know what to expect, but it was interesting to mix different things together. Although I don't really enjoy waiting to see the reactions. It was a good way to end our last experiment since it was pretty fast. I wouldn't mind repeating a lab like this.

Conclusion: In conclusion, this lab was mainly to focus on the reactions chemicals like Antigen, secondary antigen, and enzyme substrate react when mixed together.