Title: Elisa Antibody Test

Purpose

The reason for this lab is to utilize a research facility strategy to have the option to distinguish the presence of a particular antibodies, antigens, or different substances in a natural example. The test is mostly used in medical diagnostics to see if antibodies are present that are linked to different infectious diseases. The test could likewise decide if an individual has created antibodies in light of a disease or immunization. In the ELISA, antibodies or antigens are bound to a solid surface like a microplate. In general, the ELISA test is utilized in the clinical field to have the option to identify antibodies .

Procedure

- 1. Label the yellow tubes to identify samples being tested
- 2. Label your 12-well strip 3 with a "+" for positive control 3 with a "-" for a negative control and the remaining 3 with sample A and 3 with sample B
- 3. Use a fresh pipet tip to transfer 50ul of purified antigen(AG) into each of the 12 wells of the microplate strip.
- 4. Wait 5 min for the antigen to bind
- 5. Wash:
- a) the tip of the strip upside on the paper towel and gently tap a few times upside down. Make sure to avoid splashing.
- b) Discard The Top Paper Towel
- c) Use your transfer pipet to fill each week with wash buffer taking care not to spill over the neighboring wells.
- d) Tipthemicroplatestripupsidedownontothepapertowelandtap
- e) Discard the top 2-3 paper towels
- 6. Repeat wash step 5
- 7. Use a fresh pipet tip to transfer 50ul of the positive control (+) into the three "+" wells.
- 8. Use a fresh pipet tip to transfer 50ul of the negative control(-) into the three "-" wells
- 9. Transfer 50ul of each of your teams serum samples into each of appropriate initaled three wells using a fresh pipet tip for each serum sample
- 10. Wait 5 min for the antibodies to bind together
- 11. Wash the unbound primary antibody out of the wells by repeating all of the wash steps 5 two times
- 12. Use a fresh pipet to transfer 50ul of secondary antibody (SA) into each of the 12 wells of microplate strip
- 13. Wait 5 min for antibodies to bind to their targets
- 14. Wash the unbound secondary antibodies out the wells by repeating wash step 5 three times
- 15. use a fresh pipet tip to transfer 50ul of enzyme substrate (SUB) into each of the 12 wells of microplates strip
- 16. wait 5 min observe and record the results

Result

After 5 min of observation the first three positive strips turn Sky blue color. And the rest remained unchanged.



Discussion:

In the middle of between every fluid that we needed to out we tried to wash completely to obtain the right outcomes. We thought we had done something wrong because no one else said anything, but neither did the other partners. We knew which fluid was which by the sheet. The yellow cylinders ser understudy tests, the violet cylinder was positive control, the blue cylinder was negative control, the green cylinder was purged antigen, the orange cylinder was auxiliary immunizer, and the earthy colored tube was chemical substrate.

Conclusion:

we had the option to get a response once the compound substrate was set in the microplate strips. We got a response from the three positive control microplate strip it transformed into a sky blue really intending that there is a presence of antigen-neutralizer complex. It is normal for the positive control to turn blue, and it is also normal for the negative control to turn red, but ours did not react.