Results

1. In your lab notebook, record your results by copying Results Table 1. Mark which patient sample you tested (A, B, C, or D). Then record whether your results were positive (color change), negative (no color change) or inconclusive (slight color change).

Results Table 1.

<table>
<thead>
<tr>
<th>Patient Sample</th>
<th>Patient Sample</th>
<th>Negative Control</th>
<th>Positive Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Collaborate with another group that tested the other two patient samples. Be sure to include their group name, sample data, and controls. Combine their data with yours in Results Table 2.

Results Table 2.

<table>
<thead>
<tr>
<th>Patient</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Collaborating Group Negative Control</th>
<th>Collaborating Group Positive Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 2</td>
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</tr>
<tr>
<td>Well 3</td>
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</tr>
</tbody>
</table>

Analysis

Write your analysis questions and answers in your lab notebook.

3. If a well is blue is the target antibody present? Explain.

4. Did any of the blood serum samples contain the antibody against the HIV p24 antigen? How do you know?

5. Were your predictions correct?
Well Diagram

Use this diagram of the wells to draw what is happening as you go through the ELISA protocol. Draw in each well as you wait during each incubation step.

**STEP 1**  Add antigen

**STEP 2**  Add patient serum

**STEP 3**  Add secondary antibody

**STEP 4**  Add TMB substrate

- **Negative Sample**
  - WASH

- **Positive Sample**
  - WASH

- **Symbols**:
  - ○ = antigen
  - ♻️ = 1° antibody
  - ♣️ = 2° antibody-HRP
  - ♣️ = TMB substrate
  - ♣️ = cleaved substrate