EXERCISE 3: Detection of IgE Antibodies

Textbook: Stanley, Pages 29, 467-468, 475-476

Skills: 15 points

Objectives:

1. Perform serology laboratory “kit tests” to obtain control and patient results that match instructor values.
2. Follow instructions of kit reagent package insert to
   - select, and evaluate appropriate specimens
   - perform testing to obtain acceptable results of controls and patient samples.
3. Evaluate reagent package inserts to determine the substance being analyzed, the principle of the procedure, the expected value, significance of abnormal results, limitations of the procedure, and troubleshooting procedures to follow if/when control results are unacceptable.
4. Appropriately record and report results as instructed.
5. Utilize lecture notes, textbook and laboratory (including product insert) information to answer study questions.

Introduction:

Many tests performed in the Serology laboratory utilize “kit tests”, which come prepackaged with reagents, controls, slides, tubes, etc., Almost everything needed to perform the procedure except the patient sample. Additional item(s) which are needed but not included in the kit are listed in the reagent product insert. A “reagent product insert” gives detailed instructions on how to perform the procedure as well as the principle and theory of the test procedure, explanation of the test, expected values, required sample, quality control and limitations of the procedure. It is critical that the laboratory worker be familiar with the details of the procedure when using new kits.

Many of the serology laboratory exercises performed this semester utilize kit tests. It is important for your understanding that you review and consider the objectives and content of this exercise.

The principle, reagents, supplies and instructions for performing this procedure will be given to you as a handout before the laboratory begins.
EXERCISE 4: Detection of IgE Antibodies

Recording/Interpreting Results

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
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Name of test kit:

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Lot Number</th>
<th>Expiration Date</th>
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<table>
<thead>
<tr>
<th>Patient Name</th>
<th>Patient ID Number</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Control</td>
<td></td>
<td></td>
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<tr>
<td>Negative Control</td>
<td></td>
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</tbody>
</table>

Are the results of this test valid? Explain.

Are the results of this test normal? Explain.
EXERCISE 4: Detection of IgE Antibodies

Study Questions

Name ____________________________  Date _____________________

Refer to the reagent kit package insert to answer the following questions. Your answers should be complete, specific, yet brief.

1. Describe the substance being tested. (0.5)

2. What type of patient specimen is required or acceptable for this test? (0.5)

3. What is the expected value for this procedure? (1)

4. List 2 limitations of this procedure as outlined by the manufacturer. (1)
   A.
   B.

5. State the troubleshooting procedure to follow if controls do not give expected results. (1)