

# HIV Rapid Test Control Pack Chembio HIV Reactive/Nonreactive Controls

Read this Product Insert and the Chembio HIV 1/2 STAT-PAK® Assay and/or Chembio SURE CHECK® HIV 1/2 Assay Product Insert(s) completely before using this product. Follow the instructions carefully when performing the test as not doing so may result in inaccurate Test Results. Users of this test should follow the CDC Universal Precautions for prevention of transmission of Human Immunodeficiency Virus, Hepatitis B Virus, and other blood borne pathogens.¹

STORAGE: Store at 2 to 8°C (36 to 46°F)

### **INTENDED USE**

The Chembio HIV Reactive/Nonreactive Controls are quality control reagents for use with the Chembio HIV 1/2 STAT-PAK® Assay and/or Chembio SURE CHECK® HIV 1/2 Assay only.

### Run the Kit Controls under the following circumstances:

- Each new operator prior to performing tests on patient specimens.
- When opening a new test Kit lot,
- · Whenever a new shipment of test Kits is received,
- If the temperature of the test storage area falls outside of 8 to 30°C (46 to 86°F),
- If the temperature of the testing area falls outside of 18 to 30°C (64 to 86°F),
- At periodic intervals as indicated by the user facility.

It is the responsibility of each laboratory using the Chembio HIV 1/2 STAT-PAK® Assay and/or Chembio SURE CHECK® HIV 1/2 Assay to establish an adequate quality assurance program to ensure the performance of the device under its specific locations and conditions of use.

# SUMMARY AND EXPLANATION OF HIV REACTIVE AND NONREACTIVE CONTROLS

Chembio HIV Reactive/Nonreactive Controls are human, plasmabased reagents. The Controls are specifically formulated and manufactured to ensure performance of the test, and are used to verify the user's ability to properly perform the test and interpret the results. The Chembio HIV-1 and HIV-2 Reactive Controls will produce a REACTIVE Test Result and have been manufactured to produce a faint Test "T" line. The Chembio Nonreactive Control will produce a NONREACTIVE Test Result. Use of Control Reagents manufactured by another source may not produce the required results, and therefore, will not meet the requirements for an adequate quality assurance program for the Chembio HIV 1/2 STAT-PAK® Assay and/or Chembio SURE CHECK® HIV 1/2 Assay.

### **MATERIALS PROVIDED**

Each HIV Rapid Test Control Pack contains a Product Insert and three Vials (one HIV-1 Reactive Control, one HIV-2 Reactive Control and one Nonreactive Control) as described.

# HIV 1/2 STAT-PAK® Assay

Each control vial contains sufficient volume to run 50 tests.

## SURE CHECK® HIV 1/2 Assay

Pipettor Method: Each control vial contains sufficient volume to run 100 tests.

Transfer Pipette Method utilizing SURE CHECK® HIV Control Accessory Kit: Each control vial contains sufficient volume to run 20 tests.

# **HIV-1 Reactive Control**

One Vial containing 0.25 mL of heat inactivated human plasma positive for antibodies to HIV-1, diluted in normal human plasma. Negative for Hepatitis B surface antigen, Hepatitis C antibody and HTLV I/II antibodies.

### **HIV-2 Reactive Control**

One Vial containing 0.25 mL of heat inactivated human plasma positive for antibodies to HIV-2, diluted in normal human plasma. Negative for Hepatitis B surface antigen, Hepatitis C antibody and HTLV I/II antibodies.

### **Nonreactive Control**

One Vial containing 0.25 mL of normal human plasma negative for antibodies to HIV-1 and HIV-2. Negative for Hepatitis B surface antigen, Hepatitis C antibody and HTLV I/II antibodies.

# MATERIALS REQUIRED AND PROVIDED in the Chembio HIV 1/2 STAT-PAK® Assay and/or Chembio SURE CHECK® HIV 1/2 Assay

### HIV 1/2 STAT-PAK® Assay

Each Kit contains the items to perform 20 tests:

- 20 Subject Information Notices
- 20 STAT-PAK<sup>®</sup> individually pouched Test Devices
- 20 Disposable 5 μL Sample Loops
- 1 HIV Running Buffer (3.5 mL)
- 1 Product Insert

# SURE CHECK® HIV 1/2 Assay

Each Kit contains the items to perform 25 tests:

- 25 Subject Information Notices
- 25 Disposable Test Stands
- 25 Pouches, each containing:
  - o 1 Sampler with a Test Strip inside
  - $_{\odot}$   $\,$  1 Buffer Vial attached to the Sampler (~350  $\mu\text{L})$
  - o 1 Sterile Safety Lancet
  - o 1 Bandage
  - 1 Desiccant Packet
- 1 Product Insert

### **MATERIALS REQUIRED BUT NOT PROVIDED**

- · Clock, watch or other timing device
- Disposable gloves
- Biohazard disposal container

# For Chembio HIV 1/2 STAT-PAK® Assay

• Pipettor capable of delivering 5  $\mu L$  of sample may be used in lieu of the disposable 5  $\mu L$  Sample Loop supplied with the Chembio HIV 1/2 STAT-PAK® Assay

### For Chembio SURE CHECK® HIV 1/2 Assay

 Pipettor capable of delivering 2.5 μL of sample or transfer pipette and clean non-absorbent disposable surface such as a plastic weigh boat (SURE CHECK® HIV Control Accessory Kit: Catalog # 60-9549-1).

### **WARNINGS**

# For IN VITRO diagnostic use

Read this Product Insert and the Chembio HIV 1/2 STAT-PAK® Assay and/or Chembio SURE CHECK® HIV 1/2 Assay Product Insert(s) completely before using this product. Follow the instructions carefully as not doing so may result in inaccurate Test Results.

- Users of this test should follow the CDC Universal Precautions for prevention of transmission of Human Immunodeficiency Virus Hepatitis B Virus, and other bloodborn pathogens.<sup>1</sup> And "Updated U.S Public Health Service Guidelines for the Management of Occupational Exposure to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis"
- Handle the Chembio HIV Reactive/Nonreactive Controls, and materials contacting the Controls, as if capable of transmitting infectious agents.
- Do not eat, drink or smoke in the area where specimens and kit reagents are handled. Avoid any contact with hands, eyes or mouth during specimen collection and testing.
- Wear protective clothing such as laboratory coats, disposable gloves and eye protection when handling specimens.
- 6. Dispose of all specimens and materials used in the test procedure in a biohazard waste container. Lancets should be placed in a puncture-resistant container prior to disposal. The recommended method of disposal of biohazard waste is autoclaving for a minimum of 1 hour at 121°C. Disposable materials may be incinerated. Liquid wastes may be mixed with appropriate chemical disinfectants. A freshly prepared solution of 10% bleach (0.5% solution of sodium hypochlorite) is recommended. Allow 60 minutes for effective decontamination. NOTE: Do not autoclave solutions that contain bleach.
- Use 10% bleach or other appropriate disinfectant to wipe all spills. The bleach solution should be made fresh each day.
- Use of Kit Control reagents manufactured by another source may not produce the required results, and therefore, will not meet the requirements for an adequate quality assurance program for the Chembio HIV 1/2 STAT-PAK® Assay and/or Chembio SURE CHECK® HIV 1/2 Assay.

## STORAGE AND STABILITY

The Chembio HIV Reactive/Nonreactive Controls should be stored at 2 to 8°C (36 to 46°F). Do not use beyond the indicated expiration date. Open the Control Vials only when you are performing tests. Recap and store the Control Vials in their original container at 2 to 8°C (36 to 46°F) after use.

The test devices should be stored in individual unopened pouches at 8 to 30°C (46 to 86°F). Do not freeze. Do not open the pouch until you are ready to perform a test. When stored as indicated, Test Devices are stable until the expiration date marked on the pouch. Running Buffer (Chembio HIV 1/2 STAT-PAK® Assay) should also be stored at 8 to 30°C (46 to 86°F) in its original Vial.

### **TEST PROCEDURE**

All components for the Chembio HIV 1/2 STAT-PAK® Assay and/or Chembio SURE CHECK® HIV 1/2 Assay are ready to use as supplied. Instructions for use are given in the Chembio HIV 1/2 STAT-PAK® Assay and/or Chembio SURE CHECK® HIV 1/2 Assay Product Insert(s). Follow directions as indicated. If the specimen to be tested is refrigerated, remove it from the refrigerator and allow it to come to a temperature of 18 to 30°C (64 to 86°F) prior to testing.

External control material stored at refrigerated temperatures does not need to be brought to operation temperature (18 to 30°C; 64 to 86°F) prior to testing.

# Procedure for Using Controls with Chembio HIV 1/2 STAT-PAK $^{\odot}$ Assay

- Open a Control Vial containing the Control Reagent. Note: The Control Reagents are clear to straw-colored. Do not use if the Control Reagent appears visually cloudy or discolored.
- Remove the Chembio HIV 1/2 STAT-PAK® Test Device from its pouch and place it on a flat surface (It is not necessary to remove the desiccant from the pouch).

- Label the Test Device with Control Reagent name or identification number.
- 4. Touch the 5 μL Sample Loop provided to the Control Reagent, allowing the opening of the Sample Loop to fill with the liquid. Use separate and unused specimen Sample Loops for each Control Reagent. Alternatively, a calibrated pipettor can be used instead of the Sample Loop. Use a new pipette tip with each Control Reagent.
- 5. Holding the Sample Loop vertically, touch it to the sample pad in the center of the SAMPLE (S) well of the Test Device to dispense ~5 μL of Control Reagent onto the sample pad. If using a calibrated pipettor, dispense the Control Reagent into the SAMPLE (S) well.
- 6. Invert the Running Buffer bottle and hold it vertically (not at an angle) over the sample well. Add 3 drops ( $\sim$  105  $\mu$ L) of Buffer slowly, dropwise, into the SAMPLE (S) well.
- 7. Read the Test Result between 15 and 20 minutes after the addition of the Running Buffer. In some cases a test line may appear in less than 15 minutes however, 15 minutes are needed to report a Nonreactive Test Result. Read Test Results in a well-lit area. Do not read Test Results after 20 minutes.
- 8. Discard the used Sample Loop, Test Device and any other test materials into a biohazard waste container.
- Reseal the Control Reagent Vials and store them in their original container at 2 to 8°C (36 to 46°F).

# Procedure for Using Controls with Chembio SURE CHECK® HIV 1/2 Assay

- Open a Control Vial containing the Control Reagent. Note: The Control Reagents are clear to straw-colored. Do not use if the Control Reagent appears visually cloudy or discolored.
- Remove Buffer Vial separate from top of Sampler and place in a Disposable Test Stand provided with Chembio SURE CHECK® HIV 1/2 Assay.
- For Control Reagent, turn Sampler upward and using a calibrated pipettor, pipet 2.5 μL of the Control Reagent into the Sampler tip. Use separate pipette tips for each Control Reagent.
  - 3a. Alternatively, using a transfer pipette (Catalog # 60-9549-1) draw the Control Reagent into the pipette to the position shown. To draw up the sample, squeeze the pipette bulb very gently to avoid drawing up too much control material.
  - Carefully dispense one drop of the Control Reagent into the weigh boat or a clean, dry surface.
  - 3c. Touch the tip of the Sampler to the drop of Control Reagent allowing the reagent to travel into the Sampler tip.
  - 3d. Use a separate pipette and weigh boat for each Control Reagent.
- With Buffer Vial in Disposable Test Stand, firmly press the Sampler tip through foil cover. Press hard until the Device is fully seated in the Buffer Cap. It will "snap" 3 times when properly seated.
  - Snap 1: through the foil
  - Snap 2: into the cap
  - Snap 3: fully seated
- Start timing wait for 15 minutes. Read the Test Results between 15 and 20 minutes. In some cases a test line may appear in less than 15 minutes, however, 15 minutes are needed to report a Nonreactive Test Result. Read Test Results in a well-lit area. Do not read Test Results after 20 minutes.
- Discard all test materials including the Test Device into a biohazard waste container.
- Reseal the Control Reagent Vials and store them in their original container at 2 to 8°C (36 to 46°F).

### **QUALITY CONTROL**

### **Built-in Control Feature**

The control line serves as a built-in internal control and gives confirmation of sample addition and proper test performance. A pink/purple line will appear in the CONTROL area if the test has been performed correctly and the Device is working properly (Please see section: Interpretation of Test Results).

#### INTERPRETATION OF TEST RESULTS

Please refer to the HIV 1/2 STAT-PAK® and/or Chembio SURE CHECK® HIV 1/2 Assay Product Insert(s) for pictorial examples of REACTIVE, NONREACTIVE and INVALID Test Results

- The CONTROL LINE which appears closer to the top of the test strip, indicates that specimen was adequately applied, and there was proper hydration and migration of reagents. The control line will become visible within 15 minutes after starting the test regardless of the HIV antibody status of the specimen.
- The TEST LINE which appears closer to the bottom of the test strip (below the control line) indicates the presence of HIV-specific antibodies. The test line will only become visible within 15 minutes after starting a valid test when HIV specific antibodies are present at detectable levels in the specimen.
- 3. INVALID A pink/purple line should always appear in the CONTROL area, whether or not a line appears in the TEST area. If there is no distinct pink/purple line visible in the CONTROL area, then the test is INVALID. Any of the lines appear outside of the areas to the Control or Test is an INVALID test. An INVALID test cannot be interpreted. It is recommended that the test be repeated with a new Device.

# **EXPECTED RESULTS**

### CHEMBIO HIV 1/2 STAT-PAK® ASSAY

### **Nonreactive Control:**

The Nonreactive Control will produce a NONREACTIVE Test Result. A pink/purple CONTROL (C) line should be present adjacent to the result window labeled "C" for Chembio HIV 1/2 STAT-PAK® Assay. There should be no visible line in the Test (T) area of the Device. This indicates a NONREACTIVE Test Result.

### **HIV-1 Reactive Control:**

The HIV-1 Reactive Control will produce a REACTIVE Test Result and has been manufactured to produce a faint pink/purple TEST (T) line. A line should be present adjacent to the result window labeled "T" for Chembio HIV 1/2 STAT-PAK® Assay. A pink/purple CONTROL (C) line should be present adjacent to the result window labeled "C" for Chembio HIV 1/2 STAT-PAK® Assay. This indicates a REACTIVE Test Result. The intensities of the TEST (T) and CONTROL (C) lines may vary. If any visible line appears in the TEST (T) and CONTROL (C) areas, the result is REACTIVE.

### HIV-2 Reactive Control:

The HIV-2 Reactive Control will produce a REACTIVE Test Result and has been manufactured to produce a faint pink/purple TEST (T) line. A line should be present adjacent to the result window labeled "T" for Chembio HIV 1/2 STAT-PAK® Assay. A pink/purple CONTROL (C) line should be present adjacent to the result window labeled "C" for Chembio HIV 1/2 STAT-PAK® Assay. This indicates a REACTIVE Test Result. The intensities of the TEST (T) and CONTROL (C) lines may vary. If any visible line appears in the TEST (T) and CONTROL (C) areas, the result is REACTIVE.

# CHEMBIO SURE CHECK® HIV 1/2 ASSAY

### **Nonreactive Control:**

The Nonreactive Control will produce a NONREACTIVE Test Result. A pink/purple CONTROL line should be present closer to the top of the strip for Chembio SURE CHECK® HIV 1/2 Assay. There should be no visible line in the Test area of the Device. This indicates a NONREACTIVE Test Result.

### **HIV-1 Reactive Control:**

The HIV-1 Reactive Control will produce a REACTIVE Test Result and has been manufactured to produce a faint pink/purple TEST line. Two pink/purple lines, one line should be present closer to the bottom of the strip (TEST area) and a second line should be present closer to the top of the strip (CONTROL area) for the Chembio SURE CHECK® HIV 1/2 Assay. This indicates a REACTIVE Test Result. The intensities of the TEST and CONTROL lines may vary. If any visible line appears in the TEST and CONTROL areas, the result is REACTIVE.

#### **HIV-2 Reactive Control:**

The HIV-2 Reactive Control will produce a REACTIVE Test Result and has been manufactured to produce a faint pink/purple TEST line. Two pink/purple lines, one line should be present closer to the bottom of the strip (TEST area) and a second line should be present closer to the top of the strip (CONTROL area) for the Chembio SURE CHECK® HIV 1/2 Assay. This indicates a REACTIVE Test Result. The intensities of the TEST and CONTROL lines may vary. If any visible line appears in the TEST and CONTROL areas, the result is REACTIVE.

**NOTE:** If the Test Result for the Nonreactive Control, HIV-1 Reactive Control or HIV-2 Reactive Control is not as expected, the test should be repeated using a new Test Device and Control Specimen. If the HIV Control Reagents do not produce the expected results, contact Chembio Diagnostic Systems Customer Service at (631) 924-1135 or Toll Free at 1-800-327-3635 if you are unable to obtain a valid Test Result upon repeat testing.

### LIMITATIONS

The Chembio HIV Reactive/Nonreactive Controls are quality control reagents for use **ONLY** with Chembio HIV 1/2 STAT-PAK® Assay and/or Chembio SURE CHECK® HIV 1/2 Assay.

## **REFERENCES**

- Centers for Disease Control and Prevention (CDC). Universal Precautions for prevention of transmission of human immunodeficiency virus, hepatitis B virus, and other bloodborne pathogens in health-care settings. MMWR 1988: 37(24):377-388.
- CDC: Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV and HIV Recommendations for Postexposure Prophylaxis. MMWR 2001; 50(RR-11):1-42.

CHEMBIO DIAGNOSTIC SYSTEMS, INC. 3661 HORSEBLOCK ROAD MEDFORD, NY 11763, USA

> Tel: 1-800-327-3635 Tel: (631) 924-1135 Fax: (631) 924-2065

Email: info@chembio.com Web Site: <u>www.chembio.com</u>

# **ORDERING INFORMATION**

REF 60-9549-0 Chembio HIV Rapid Test Control Pack

### **AVAILABLE ACCESSORIES**

60-9505-1 Chembio HIV 1/2 STAT-PAK® Assay, 20 Test Kit

60-9507-0 Chembio SURE CHECK® HIV 1/2 Assay, 25 Test Kit

REF 60-9549-1 SURE CHECK® HIV Control Accessory Kit, Set of 36

# SYMBOL LEGEND

CONSULT THE MANUAL BEFORE USE

CAUTION, CONSULT ACCOMPANYING DOCUMENTS

2 DO NOT REUSE

FOR USE WITHIN TEMPERATURE LIMITS

IN VITRO DIAGNOSTIC MEDICAL DEVICE

LOT BATCH CODE

REF PRODUCT CATALOG NUMBER

MANUFACTURERS IDENTIFICATION

DATE OF MANUFACTURE

USE BY DATE