



Performing the CTA Carryover PVT Procedure on the LXi or DXC 600i System

The CTA carryover procedure is intended to qualify the wash efficiency of the CTA to ensure that the carryover is within the allowable range. This test takes approximately one hour to complete.

Required Materials

- Access 2 Automation rack
 - Clean, empty aliquot vessels (3)
 - Micropipette capable of delivering 400 uL and 650 uL
 - Access System Check solution
 - Access Wash Buffer
 - 2 mL sample cups (8)
 - 13 x 75 mm sample racks (2)
1. From the Access 2i screen, select the CTA icon and select **Set CTA Offline F8**. The CTA icon will turn red while the CTA is Offline.
 2. From the LX or DXC Main Menu, select the **Rgt / Cal** icon to display the Reagent Status screen.
 3. Select the **Supplies** tab to display the Supplies Status screen.
 4. Under the **CTA Supplies Status** heading, be sure the **AV Supply** field displays a supply of 8 AVs or more. If the supply is less than 8 AVs, add more AVs now. To add more AVs, select **AV Supply** and then select **Load**. Follow the instructions on the screen to load AVs.
 5. From the LX or DXC Main Menu, be sure that the system is in the **Standby** mode. Note: The Access can be in **Local** mode.
 6. Select the **Utils** icon to display the Utilities window.

7. Continue with the steps below that are appropriate for your system.

LXi	DXC 600i
1. Select <6> PVT	
2. Select <2> CTA Performance Verification Tests , then select <1> Carryover Tests .	2. Click on the down arrow to display the Functional Area pull down menu and Select CTA Performance Verification Tests .
3. Select <1> CTA Carryover to display a list of instructions for preparing the sample cups.	

8. Label and prepare three TEST cups (TEST 1, TEST 2, TEST 3) by dispensing a minimum of 650 µL of Access Wash Buffer into three 2 mL sample cups.
9. Label and prepare three HIGH, or contaminant, cups (HIGH 1, HIGH 2, HIGH 3) by dispensing a minimum of 650 µL of Access System Check Solution into three 2 mL sample cups.
10. Label and prepare two WASH, or end of run, wash cups (WASH 1, WASH 2) by dispensing a minimum of 650 µL of Access Wash Buffer into two 2 mL sample cups.
11. Load the sample cups you prepared in steps 8-10 into two 13 x 75 mm sample racks, as directed in Table 1.

Rack Position	Rack 1	Rack 2
1	System Check Solution (HIGH 1)	System Check Solution (HIGH 3)
2	Access Wash Buffer (TEST 1)	Access Wash Buffer (TEST 3)
3	System Check Solution (HIGH 2)	Access Wash Buffer (WASH 1)
4	Access Wash Buffer (TEST 2)	Access Wash Buffer (WASH 2)

Table 1: Preparing the Carryover Sample Racks

12. Open the cover to the LX or DXC onload tray and load the racks. Load rack 1 first, followed by rack 2.
13. Close the cover and select the **Start** button on the LX or DXC screen.
14. The system aliquots the necessary samples into the AVs, and the screen displays a timer to indicate that the CTA is processing samples. The first phase of the PVT procedure takes approximately 8 minutes to complete. While the system aliquots samples, continue with step 15 of this procedure.
15. From the Access 2i Main Menu or **Menu** tab, select **Sample Manager F1** to display the Sample Manager screen.

16. In the **Rack ID** field, type the rack ID of the automation rack you will use on the Access 2i system and press **[Enter]**.
17. Select **Test Request F3** to display the Test Request screen. If the Test Menu is not displayed, select **Show Test Menu F3**.
18. Select **More Options F8**.
19. Select **Request Service Assay F3** to display the Request Service Assay window.
20. Enter CONTROL1 (do not use spaces) in the **Enter Service Assay Sample ID:** field, then select **OK F1**.
21. Select **LumiAP 907** three times to program three replicates, then press **<Enter>**. Press **<Enter>** again to advance to the next line.
22. Repeat steps 18-21 for the next five samples, in the following order: CONTROL2, TEST1, TEST2, TEST3, WASH3.

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23. When the CTA has aliquoted sample into the appropriate AVs, a list of instructions for the next phase of the PVT carryover procedure is displayed on the LX or DXC screen.

When the list is displayed, open the CTA canopy and remove the TEST1, TEST2, and TEST3 AVs from the CTA AV Queue tray (See Figure 1, items 1-3). Place the 3 AVs in the automation rack you programmed on the Access 2i Test Requests screen (See Figure 2, items 3-5).

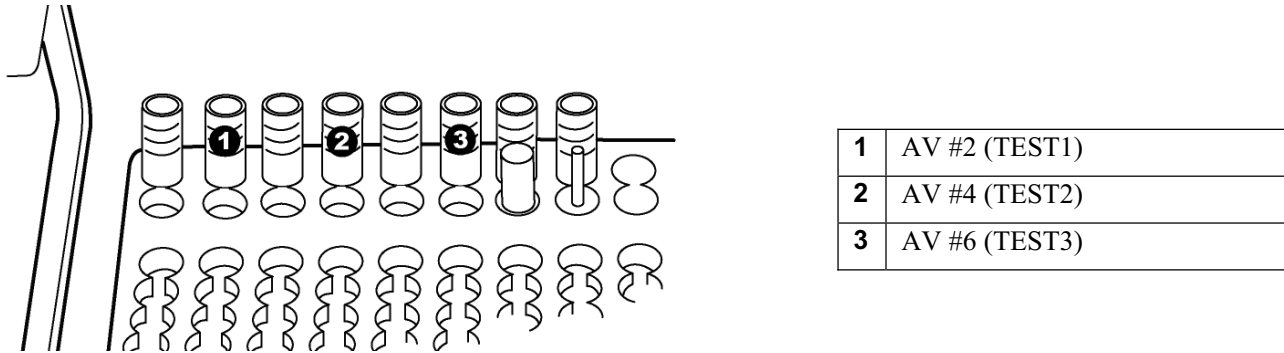


Figure 1: Test Carryover AVs in the CTA AV Queue Tray

- a). Move AV #2 (TEST1) to **position 3** of the automation rack (See Figure 2, item 3).
 - b). Move AV #4 (TEST2) to **position 4** of the automation rack (See Figure 2, item 4).
 - c). Move AV #6 (TEST3) to **position 5** of the automation rack (See Figure 2, item 5).
24. Remove the five remaining AVs from the CTA AV Queue tray. Discard these AVs in the biohazard waste.
 25. Prepare the next three AVs for the automation rack (CONTROL1, CONTROL2, and WASH3) by dispensing 400 µL of Access Wash Buffer into each AV.
 26. Place the prepared AVs into **position 1, position 2, and position 6** of the automation rack (See Figure 2, items 1, 2 and 6).

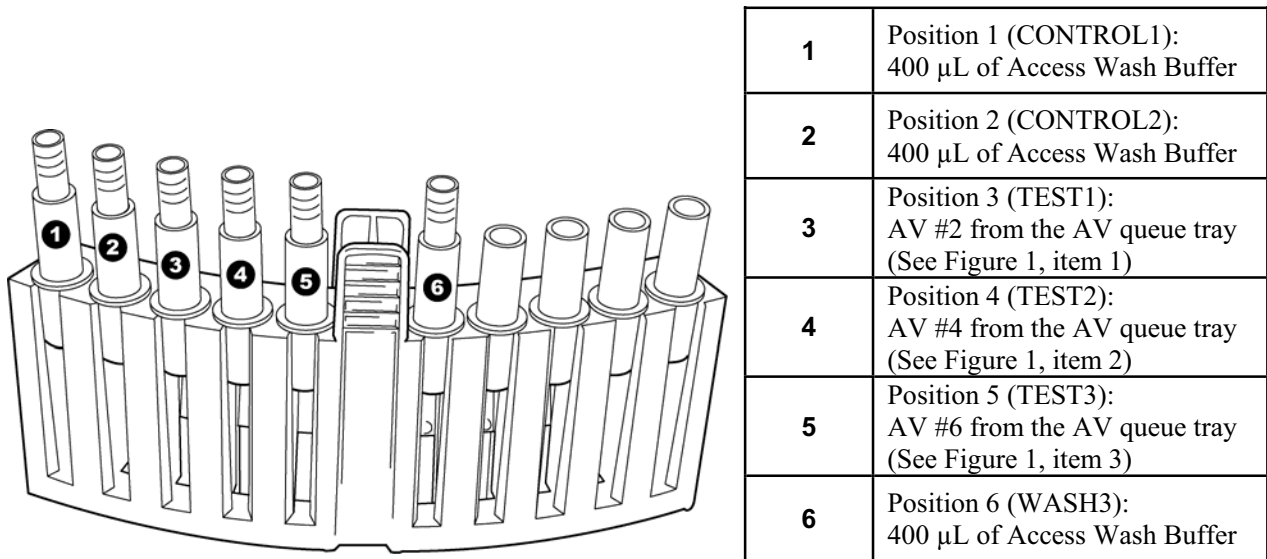


Figure 2: CTA Carryover Automation Rack

27. When you have removed the remaining AVs from the CTA AV Queue tray and prepared the automation rack, close the CTA canopy and select **<CLOSE>** on the LX or DXC screen.
28. Select **Load Rack F1** and load the rack onto the system. Select **Done F1** when the rack is loaded.
29. Select the **<Run>** button on the Access 2i screen.
30. Select the **Main** icon on the LX or DXC screen to return to the Main Menu.
31. When the testing is complete, select the **CTA** button on the Access 2i screen to display the CTA Status window.
32. Select **Set CTA Online F8**.

The CTA is set online and the **CTA** button returns to its normal status.

33. Print the CTA Carryover PVT results. From the Access 2i Main Menu or **Menu** tab, select **Test Results F2**.
34. On the Test Results screen, highlight the test results for TEST1, TEST2, and TEST3.
35. Select **Print F7**, and then select **Report F1** to display the Print window.
36. In the **Report** field, select Test Results Report.
37. Select **Current Selection**, and then select **OK F1** to print the Test Results Report.
38. Record the results on the provided worksheet to evaluate carryover acceptability.

If...	Then...
The mean of the three replicates for each of the test AVs (TEST1, TEST2, and TEST3) is < 25,000 RLUs,	the test results are acceptable.
The mean of the three replicates for each of the test AVs (TEST1, TEST2, and TEST3) is > 25,000 RLUs,	troubleshoot the problem by performing the following steps: <ol style="list-style-type: none"> 1. Verify that the CTA aliquot probe is clean. 2. Confirm that the CTA wash syringe is functioning properly, and that its fittings and connections are secure. 3. Watch the syringe fill and look for any bubbles to be sure that there is sufficient delivery of Access Wash Buffer solution. 4. If you need additional assistance, contact the Clinical Support Center, or your local Beckman Coulter representative.



Carryover Test Worksheet

Platform: LXi DXC 600i System ID: _____

Record Test RLU values for each replicate.			
Test Sample	Replicate	Test RLU Value	Maximum Test RLU = 25,000
TEST 1	1		PASS FAIL
	2		
	3		
Mean RLU Value _____			
TEST 2	1		PASS FAIL
	2		
	3		
Mean RLU Value _____			
TEST 3	1		PASS FAIL
	2		
	3		
Mean RLU Value _____			
PASS/FAIL CRITERIA: Compare the Mean RLU values to the Maximum Test RLU. The Mean RLU Value must be less than the Maximum Test RLU.			

Performed by: _____

Date: _____