ACCESS 2 CARRYOVER TEST PROCEDURE*

Performing the pipettor carryover test on the Access 2 immunoassay system

* For use with the Access 2 immunoassay system only

The Access 2 carryover test procedure verifies that your Access 2 Immunoassay system is washing the sample pipettor properly between each sample. The pipettor carryover test confirms that any carryover from one sample to the next is less than 10 ppm.

Perform this procedure as determined by your laboratory's inspection requirements, or if instructed to do so by Beckman Coulter technical support.

Required Materials

- System check solution, p/n 81910 (one 4.0 mL vial)
- Access wash buffer II, p/n A16792
- Access 2.0 mL sample cups, p/n 81902 (seven sample cups)
- Access 2 sample rack, bar code label rack ID = 1 to 99 (one rack)
- 500 µL pipette

Preparing and loading samples

Use this procedure to prepare and load samples for the pipettor carryover test.

WARNING: You will come in contact with potentially infectious materials during this procedure. Handle and dispose of biohazard materials according to proper laboratory procedures. Proper hand, eye, and facial protection is required.

CAUTION: Avoid cross-contamination as you prepare the carryover test samples. Handle the system check solution with extreme care. Avoid splashes, dragging or touching the system check solution pipette tip, setting down glass tubes that contain system check solution, or other activities that might result in sample contamination.

1. Select an empty Access 2 sample rack with a rack ID label between 1 and 99.
2. Place empty 2.0 mL sample cups in rack positions 2, 4, and 6.
3. Pipette a minimum of 300 µL of system check solution into each empty cup.

   NOTE: Always fill the empty sample cups with system check before you load and fill sample cups with wash buffer in steps 4 through 6. This minimizes the chance of accidentally contaminating the wash buffer cups with system check solution.
4. Place empty 2.0 mL sample cups in positions 1, 3, 5, and 7 of the same sample rack.
5. Open a new, previously unopened bottle of Access 2 wash buffer.
6. Pipette 500 µL of wash buffer into the empty cups in rack positions 1, 3, 5, and 7.

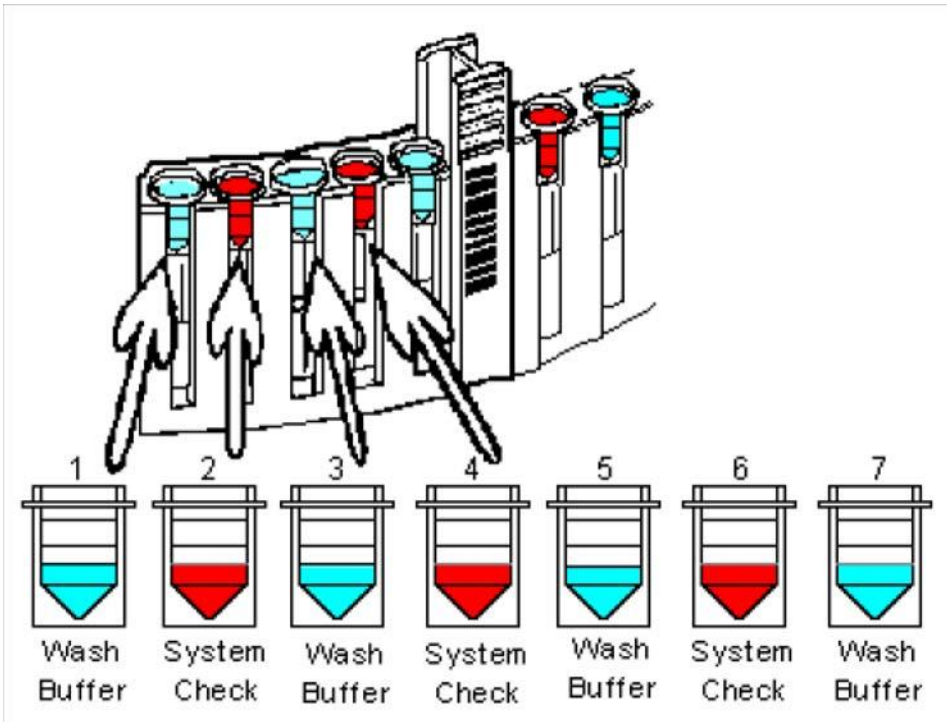

Figure 1. Preparing the pipettor carryover test procedure sample rack

Requesting carryover tests

Use this procedure to request the pipettor carryover tests.

1. From the Main Menu, select **Sample Manager F1**.
2. Enter the rack ID that is printed on the rack ID label in the **Rack ID** field. Select **Enter**.
3. Select **Test Request F3**.

   NOTE: Do not enter a sample ID.
4. Repeat steps 5 through 9 for each sample on the rack.
5. Select **More Options F8**.
6. Select **Request Service Assay F3**.
7. Enter the appropriate service assay sample ID from Table 1 below in the **Enter Service Assay Sample ID** field.

Sample cup	Sample ID
1	baseline
2	systemcheck
3	carryover1
4	systemcheck
5	carryover2
6	systemcheck
7	carryover3

Table 1: Service assay sample IDs

8. Select **OK F1**.
9. Select the appropriate test from the Service Assay Test menu.
   a. Select one replicate of test **AP25INC** (**test #955**) for the **system check solution samples in positions 2, 4, and 6**.
   b. Select three replicates of test **AP25** (**test #910**) for the **wash buffer samples in positions 1, 3, 5, and 7**.
10. Select **Load Rack F1**.
11. Load the sample rack and then select **Done F1**.
12. Select **Run** to begin sample processing.

Printing the carryover results

Use this procedure to print the pipettor carryover test results.

1. From the Main Menu select **Test Results F2**.
2. Select **Filter F1**.
3. Select **All Samples Loaded Between**.
4. Select **Comp. Time** and then check the **Ascending** box.
5. Select **OK F1**.
6. Enter an appropriate **Start Date/Start Time** and **End Date/End Time** range that will capture the pipettor carryover test results.
7. Select **OK F1**.
8. Select **Print F7**.
9. Select **Report F1**.
10. Select **Test Results Report** and then select the **All (filtered results)** option.
11. Select **OK F1**.

    NOTE: If you do not see RLUs on the printed report, select **More Options F8** and then select **Configure Screen F2**. Select **Rack**, **Comp. Time**, **RLU**, and **Pipettor** from the **Optional Columns** list. Select **OK F1** to save your changes. You may need to deselect an existing column to make room for one of the new column options.

Calculating pipettor carryover test results

Use this procedure and the example table below to help you calculate your pipettor carryover test results.

1. Calculate the baseline result. The baseline result is the median, or middle, value of the three baseline replicates from cup 1. The baseline result should be less than 9000 RLUs.
   a. **From the example table below: the baseline result = 7750.**
   b. **Contact Beckman Coulter technical support if the baseline result is greater than 9000 RLUs (see the contact information provided on page six.**
2. Calculate the maximum carryover RLU by adding 17500 to the baseline result.
   a. **From the example table below: 7750 + 17500 = 25250**
3. Compare the RLU result of each carryover test replicate to the maximum carryover RLU value that you calculated in step 2. The carryover RLU result is acceptable if it is less than the calculated maximum carryover RLU.
   a. **From the example table below: the first replicate from carryover sample 2 does not pass.**
   b. **Contact Beckman Coulter technical support if one or more of the carryover RLU values are greater than the maximum carryover RLU (see the contact information provided on page six).**

Sample ID	Rep	RLU	Pass	Fail
Wash buffer baseline (cup 1) median/middle value	1	7750	7750 + 17500 = **25250 (maximum allowable carryover RLU)**	
	2	7600		
	3	7920		
Carryover sample 1 (cup 3)	1	8000	**X**	
	2	9000	**X**	
	3	8000	**X**	
Carryover sample 2 (cup 5)	1	27900		**X**
	2	9000	**X**	
	3	8000	**X**	
Carryover sample 3 (cup 7)	1	15000	**X**	
	2	10000	**X**	
	3	9000	**X**	

Table 2: Pipettor carryover test results (example only)

Contact information

For more information about the Access 2 pipettor carryover test procedure, contact Beckman Coulter technical support.

- From our website: http://www.beckmancoulter.com
- By phone, call 1-800-854-3633 in the United States and Canada
- Outside the United States and Canada, contact your local Beckman Coulter representative

For Beckman Coulter's worldwide office locations and phone numbers, please visit www.beckmancoulter.com/contact

APPENDIX A:
PIPETTOR CARRYOVER TEST WORKSHEET

System ID _____

1. Calculate the wash buffer baseline RLU:			
Sample ID and sample rack position	**Rep**	**RLU**	**baseline (or median) result**
Wash buffer baseline (cup 1) median/middle value	1		
	2		
	3		
2. Calculate the maximum carryover RLU:	**wash buffer baseline RLU** _____ **+ 17500 =** _____		

3. Record the RLU values for each carryover test replicate:				
Sample ID and sample rack position	**Rep**	**RLU**	**Pass**	**Fail**
Carryover sample 1 (cup 3)	1			
	2			
	3			
Carryover sample 2 (cup 5)	2			
	2			
	3			
Carryover sample 3 (cup 7)	1			
	2			
	3			

4. Compare the carryover test replicate RLUs with the maximum carryover RLU result you calculated in step 2 above. Each RLU value must be less than the maximum carryover RLU.

Performed by: _____ **Date:** _____

If you need assistance with the data analysis, please forward your results in an email message to Beckman Coulter at the following address: **immunoassay@beckman.com**