

TITLE: <b>ANTIGEN PLUS – VALIDATION</b>	FILE: <b>SOP-VALIDATION 8.5.docx</b>
Revised for Version 8.5	EFFECTIVE DATE: September 14, 20018

## **1.0 PRINCIPLE**

Antigen Plus is a software program designed to store and select red cells for antibody identification testing, by phenotype. Antigen Plus Version 8.5 is a medical device under the provisions of the FDA, 510(k) clearance number BK11045.

In order to be used as a tool by an immunohematology reference laboratory or transfusion service, the program must be validated to function as stated in the users' manual after it is installed. All validation testing scenarios will be performed by any medical technician experienced in antibody identification.

**Testing will be done in a database created for that purpose. This database will be maintained as long as the program is in use, but will not be used once validation is completed. All patient data saved in the database will not use actual patient names or identifiers.** For instructions on creating a database for validation, consult «Antigen Plus 8.5 Installation and Configuration » or contact [customerservice@antigenplus.com](mailto:customerservice@antigenplus.com) for a Cloud installation.

## **2.0 SCOPE/RELATED POLICIES**

The scope of this validation plan is to assure that the program performs to specification in the laboratory setting. SOPs will be developed to guide the use of the program and the required maintenance plan. The program will be available to all blood bank or reference laboratory technologists, including staff rotating through the special testing areas.

## **3.0 SPECIMEN**

N/A

## **4.0 MATERIALS**

A minimum of 50 different RBC samples from commercial suppliers. The mix should consist of:  
5 commercial red cell panels and 3 screening cell panels from any supplier used by the lab is to be downloaded electronically from a website and stored on the end user's system. One panel should be out of date.

Validation Lots supplied electronically by Antigen Plus.

## **5.0 SAFETY**

Compliance with Laboratory Quality Practices: Bloodborne Pathogens Employee Exposure Control Plan.

## **6.0 RECORDS/FORMS/DOCUMENTS**

User testing documentation of program activities will consist of select cell panels and panels printed by lot number to be compared with the corresponding antigram provided by the panel supplier. The results of all validation testing will be printed directly from Antigen Plus.

Screen capture pictures will be printed to demonstrate warning flags and necessary screen information.

## **7.0 QUALITY CONTROL**

N/A

## **8.0 PROCEDURE**

The following is a list of functions that must be validated before being used by the laboratory staff to create select cell panels and evaluate test results. Test case scenarios will be developed to cover the following:

1. Verification of user log-in and permission status
2. Entry of all electronic information of all RBCs as they are received by the lab must be shown to contain the correct donor#, lot #, supplier and expiration date after entering the program database.
3. Out of stock designation assigned when a cell has been used to exhaustion or as they are discarded must be shown to not be presented on a selected cell panel with the out-of-stock cell or appearing in the lot # printout.
4. Deletion of individual cell information that has not been saved with any patient identifier to correct an incorrect entry or if a sample will never again be available to the lab must be shown to remove the cell's phenotype information.
5. Deletion of a panel not used in a saved work-up by lot # must be shown to delete every cell listed in the lot #.
6. Cell selection by phenotype must be shown to be consistent.
7. Print functions must be shown to provide the correct information.
8. Out-of-date function must apply itself automatically when required.
9. For those labs entering their own cells, program must be shown to maintain correlation between Wiener phenotypes and Rh antigen typing as described in the user manual.
10. Test the save function by reloading the panel and compare printouts.
11. Show that the program can differentiate between frozen inventory and liquid inventory by selected searches.
12. Using test panels provided, verify that result columns accurately rule out the appropriate antigens.

## 9.0 Initial Settings in Options

From the Options Menu, check to see that these are your settings in System Options

System Options dialog box, General tab. The 'Antigen display order for Search, Selected Cells, and Printing:' dropdown is set to 'Standard'. Under 'Display Order of Selected Cells Panel:', 'In Order Checked' is selected. Under 'Results Scoring System:', 'Agglutination Grading (0-4+)' is selected. Other options include 'Prompt when downloaded panels contain duplicate cells' (unchecked), 'Display total negative reactions to heterozygous donors' (checked), and 'Require specimen ID for all panels' (unchecked).

System Options dialog box, Search tab. The 'Text to appear on printed Cell Lot Panels and Selected Panels:' field is set to 'Antigen Test'. Below it, 'Laboratory department or address' is empty. Several checkboxes are checked: 'Print in color on color printers', 'Print date collected line on Selected Panel', 'Print review signature lines at bottom of Selected Panel', 'Print Selected Cells in version 7.4 format', 'Print extended donor cell information', 'Print automatic evaluation', 'Leave first column blank on Selected Cells printouts', and 'Omit additional antigens for this session only'.

System Options dialog box, Printing tab. Under 'Out of Stock Inventory', 'Exclude From Searches' is selected. Below it, 'Include In Searches (for this session only)' is unchecked. 'Display cells from' is set to 'Biotech' and 'first in search results' is checked. 'Include search by donor note' is unchecked. 'Search automatically when search criteria change' is checked.

Check to see that these are your settings in Customize result columns

Customize result columns for new panels dialog box. The table below shows the settings for columns IAT, Enz, DTT, A, B, C, and D.

	IAT	Enz	DTT	A	B	C	D
Type	IAT	Enzymes	DTT	IAT	IAT	IAT	IAT
Abbreviation	IAT	Enz	DTT	A	B	C	D
Check cell	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Description							

Below the table, there are instructions: 'Drag column headers to reorder columns', 'Edit the abbreviations for columns A-D to customize column names', 'Check the box if check cells are required to confirm negative results', and 'Right-click to add or remove columns'. The 'Check cell threshold' is set to '✓'.

Check to see that these are your settings in Exclusion criteria

Exclusion criteria dialog box. The text states: 'Specify the minimum number of rule-outs needed to exclude each antigen. These minimums must meet or exceed current Antigen Plus standards (3 rule-outs for P1 and Xga, and 1 rule-out for other antigens taking dosage into account). Antigen Plus standards are based on AABB standards and best practices. These settings apply only to newly created panels. Older panels will continue using the standards in effect at the time they were created.'

Rh-Hr								Kell				Duffy	Kidd	Lewis	P	MN				Luth	Sex						
D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	3

Buttons: Restore defaults, OK, Cancel.

#### Scenario 1

- ◆ Following directions in the User's Guide create user accounts with passwords to cover all permission levels.
- ◆ Log in and out changing users from the Switch User command in the User menu. Return to original user log-in with administrator level

#### Scenario 2

- ◆ Download a 10+ cell commercial lot from each of the commercial suppliers that you use\* until you have 5 panels including one panel that is out of date. Do the same for 3 screen cell lots.
  - \* If you use or plan to use Immucor panels, check the SUT box when downloading and select some additional antigens from the list to include on your download. When doing the line-by-line comparison of the data, check against the SUT sheet from Immucor to make sure your selections have been added in the proper places. You may delete one of these lots and download it again with different criteria to double check.
- ◆ In the **Add/Edit screen**, select a lot in the Lot Number box and use the **print lot profile** function on the **lot** drop menu to print a copy of each lot added to the database.
- ◆ Do a line-by-line comparison of the data on the printout compared to the data in the antigenogram from the supplier.
- ◆ Document any variations. Sign and date the Antigen Plus copy once it contains exactly the same information as the antigenogram. Keep both copies as user testing documentation.

#### Scenario 3

- ◆ From the Add screen select a cell and mark it out of stock. Note the donor and lot number of the marked cell. Click on the Save button.
- ◆ Select the Search screen and enter the donor number—verify that it is not found. Clear the donor number and enter the lot number—verify that the out-of-stock cell is not among the cells found in the lot.
- ◆ Select the Add screen. Locate the out-of-stock cell and verify that it is marked out-of-stock in red.
- ◆ In Systems Options, change the settings to include out-of-stock in searches.
- ◆ Tab to the Search screen and enter the donor number—verify that it is found



Scenario 4

- ◆ On the Add/Edit screen select a donor number from the donor drop box that appears only once in the list.
- ◆ Bring up the cell information and do a print screen for the record.
- ◆ Delete the cell from inventory.
- ◆ Drop the donor drop box and type in the deleted donor number and open the list box. The list should show that the number is not there and no information will populate the Add/Edit screen.
- ◆ Do a print screen to confirm this for documentation.

Scenario 5

- ◆ On the Search screen select a lot number from the lot # drop box. Click Select all and choose View Selected Cells from the Panel menu. Print the Selected panel. Then click Clear All Selected Cells.
- ◆ Select that lot on the Add Screen. Delete the lot using the Delete Lot button on the bottom of the screen.
- ◆ Drop the lot # drop box and type in the deleted lot number and open the list box. The list should show that the number is not there and no information will populate the Add/Edit screen.
- ◆ Do a print screen to confirm this for documentation.
- ◆ Using the select cell panel printed in the first step, try to select at least 2 of the cells on the panel by donor number and confirm that they are no longer in the inventory attached to that lot number.

Scenario 6

- ◆ Use the following : a) C+, K-, Js(a-), 2 examples; b) D-, K+, Js(a-), 2 examples; c) C-, K-, Js(a-), 2 examples; to construct a select cell panel. Select the first 2 cells presented with each request. Save the panel with the name Sc6-1. Print the selected panel. Clear all selected cells. Go through the process again and name the panel Sc6-2.
- ◆ When both panels are printed, do a line-by-line examination to ensure that the program presented the same 6 cells in the same order and that they match the requirements set.
- ◆ Clear all selected cells and search criteria

Scenario 7

- ◆ From the Systems Options menu, select Antigen Display Order for Search, select Biotest, and using one of the previous select cells panels from Scenario 6, go to the Results panel through the File drop box. Add 0 for a negative result in all the IAT column boxes for the 9 cells selected and then select Print at the top of the screen.
- ◆ Repeat this printout 6 times by returning to the Options menu and selecting Antigen Display Order numbers for the other commercial suppliers, and returning to the Results Worksheet and selecting Print at the top of the screen.
- ◆ Compare the printed copy to the information on the screen. Note any discrepancies.
- ◆ From the Add/Edit screen, drop the lot # drop box and select one of the lot numbers on the Results Worksheet. Use the print lot # panel on the File drop box list to print this panel.

- ◆ Compare the cell data between the Results Worksheet printout and the lot # printout.
- ◆ Document any inconsistencies.
- ◆ Clear all selected cells and search criteria

#### Scenario 8

- ◆ In the search screen, select an out of date panel from the list of lot #s.
- ◆ Verify that upon selection of an out of date cell or cells, the Review Selected Cells screen appears and click Review on one cell
- ◆ From the Cell testing History screen, drop down the list of antigens to retest, check one or more and save changes, verify that these antigens now appear in the Antigens Retested list
- ◆ Print the selected cells and note the OOD designation in the far left column. Go back to **the search screen** and **clear selected cells** when this step is complete.
- ◆ Select the same panel again and verify that the retesting changes you made have been maintained with today's date.
- ◆ From the **Add/edit screen**, change the expiration date on the panel to one that is now in date. From the **search screen**, print the selected cells either from the Preview Selected Cells button or by opening the Selected Cells Worksheet in the Panel menu. Compare the first printout to the second one and look to see if the OOD designation no longer appears on every cell of the "date-altered" panel.
- ◆ Save all printouts and document any inconsistency.
- ◆ Clear all selected cells and search criteria

#### Scenario 9—NECESSARY ONLY FOR LABS THAT WILL MANUALLY ENTER THEIR OWN CELLS

- ◆ Using the Add/edit screen, clear the page as if to enter a new cell. Go to the Rh-Hr drop box and select a Weiner phenotype. Check to see if the antigen typing results that appear are correct for the phenotype selected.
- ◆ Create cell entries starting with RH1 through RH36 with a common lot number to prove that all the Weiner phenotypes produce the correct cell typings in the Rh-Hr section of the common typings.
- ◆ Change one of the RhHr antigens from positive to negative and click on save. Verify that a pop up stating that the phenotype has been cleared appears.
- ◆ Print the panel by lot number and review for any discrepancies including checking for the absence of a Phenotype designation in the cell you changed. Document findings.

#### Scenario 10

- ◆ On the search screen choose Select/Add Patient and enter name, dob, and identification number for a patient, then select Add.
- ◆ Verify that patient name and number appear on the search screen.
- ◆ Create a selected panel (e.g. to exclude Anti-E) that includes one expired cell
- ◆ When the expired cell is selected, choose Review and select and save one of the relevant antigens.
- ◆ Click on Panel and open the Selected Cells worksheet and save the panel using the **save selected panel**. Type "Panel 1" in the Full Panel Description box, and save with

- the panel number 1. Close the window and open the Results Worksheet from the Panel Menu and print it.
- ◆ Verify that the Results Worksheet contains the patient name and number and the attributed panel description.
  - ◆ On the search screen, select **clear selected cells**. The number of cells selected at the bottom of the Search screen should now read 0. Do print screen to document.
  - ◆ Go to the panel menu, drop the box and select **load saved panel**. Choose the panel saved and double click on the highlighted panel. The number of cells selected at the bottom of the Search screen should now read the same as contained in the panel printout from the first step.
  - ◆ Print out the screen and document any unexpected findings.
  - ◆ On the search screen, select clear selected cells and search criteria, then repeat the steps above using a new patient name, dob, and identification number and saving the panel with the number 2.
  - ◆ Clear all selected cells and search criteria
  - ◆ Select any of the cells used in the saved panel on the Add Screen and attempt to delete it. Verify that the delete is blocked with information about where that cell has been used.

#### Scenario 11

- ◆ Change the status of one of the 3-cell panels in stock from liquid to frozen by using the frozen button on the Add/edit screen (find the lot on the search screen, click on a cell phenotype on the screen and switch to Add/Edit screen—check to see if the lot number matches and if not drop the donor number list and select the instance of that donor with the correct lot number). Each cell must be changed individually. Save the change.
- ◆ Go to the Search screen and do a search for frozen cells only. The entire lot # of cells frozen should be presented for selection.
- ◆ Select them all and print the select cell panel resulting from the search. All cells should be marked FZN. No other cells should be presented in the search.
- ◆ Switch to the Results panel and print a copy. All cells in the Results Worksheet should still carry the FZN designation in the far left column.
- ◆ Document any inconsistencies
- ◆ Clear all selected cells and search criteria

#### Scenario 12

- ◆ Search for a red cell lot and select it by clicking on “Select All Matches.” Clear the search criteria.
- ◆ Search for a cell that is negative for E and C and select the oldest one (at the bottom of the Search grid).
- ◆ Open the Results worksheet from the Panel Menu. Assume you are testing a patient positive for E and C and enter the appropriate results
- ◆ Select File/Save Panel from the top menu
- ◆ Select a patient (enter a new patient as in Scenario 10)

- ◆ Enter 11 for a panel number and Save
- ◆ Print and then Exit the Results Worksheet and click “Clear Selected Cells”
- ◆ Select Exclusion Criteria from the Options menus. Change the default criteria to the following:

**Exclusion criteria**

Specify the minimum number of rule-outs needed to exclude each antigen. These minimums must meet or exceed current Antigen Plus standards (3 rule outs for P1 and Xga, and 1 rule-out for other antigens taking dosage into account). Antigen Plus standards are based on AABB standards and best practices.

These settings apply only to newly created panels. Older panels will continue using the standards in effect at the time they were created.

Rh-Hr								Kell				Duffy		Kidd		Lewis		P	MN				Luth		Sex		
D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
2	2	2	2	2	1	2	2	2	2	1	2	2	2	2	2	2	2	1	2	3	2	2	2	2	1	2	3

Restore defaults OK Cancel

- ◆ Select Load Saved Panel from the Panel menu and load Panel 11.
- ◆ Click on the red text “old exclusion criteria”
- ◆ Click on “update” in the Exclusion Criteria box that appears
- ◆ Print the resulting worksheet and compare the exclusions to the print out from the earlier print out. Verify that the rule-outs are the same, but the exclusions are now based on more rule-outs.
- ◆ Select more cells to allow an exclusion to occur on an antigen that had only been ruled out once. Save the panel. Print the resulting panel and verify.
- ◆ Clear all selected cells and search criteria

### Scenario 13

- ◆ From Load Saved Panel, highlight panel number 11
- ◆ Click duplicate
- ◆ Exit the Selected Panel screen and open the Results worksheet
- ◆ Print the Results worksheet and verify that the printed panel is identical to the earlier print out for Panel number 11 except that there are no results in the new panel.
- ◆ Clear all selected cells and search criteria
- ◆ From Load Saved Panel, highlight panel number 11
- ◆ Click duplicate with fresh cells
- ◆ Print the Results worksheet and verify that the printed panel contains some new cells with phenotypes substantially identical to older ones the earlier print out for Panel number 11
- ◆ Clear all selected cells and search criteria

### Scenario 14

- ◆ Select a panel of cells, keeping track of which cells you select in order. Be sure to select some cells from the same lot (but not selected in sequence) and cells with different expiration dates including some that are out of date.
- ◆ Print the Selected Cell worksheet.
- ◆ Open the Results worksheet and select the View Menu
- ◆ Choose By Expiration Date
- ◆ Observe the changed order of the cells that are now in date then lot then vial order
- ◆ Print the Selected cells worksheet to confirm.

Scenario 15

- ◆ Select a lot number that appears on the print out for saved panel 11 and find it on the Maintain Lots screen.
- ◆ Attempt to delete that lot
- ◆ Verify that you may not delete a lot that has been used in saved work.

Scenario 16

- ◆ Log out and back in as a full user.
- ◆ From the Panel menu load saved panel 11 and review it
- ◆ Confirm that after review, no results can be entered then uncheck review
- ◆ Enter results in column A and check technologist change in the View menu
- ◆ Review the panel
- ◆ Save the panel and print the results worksheet
- ◆ Verify that the review appears in Panel History and that prior iterations can be called up from there
- ◆ Clear selected cells

Scenario 17

- ◆ Log out and back in as an administrator.
- ◆ From the Panel menu load saved panel 11 and add second review.
- ◆ Save the panel
- ◆ Verify that both reviews appears in Panel History
- ◆ Confirm that after review, no results can be entered then uncheck review
- ◆ Clear selected cells
- ◆ From the Panel menu load saved panel 11 and uncheck both reviews
- ◆ Right click on each of the columns labeled A, B, C, or D and remove them
- ◆ Right Click on the ENZ column and edit the column by adding a description (e.g. Ficin)
- ◆ Right click on the DTT column and add an IAT column with not check cell labeled LIS
- ◆ Add a few results in the LIS column and save the panel.
- ◆ Print the worksheet to confirm that all the new entries appear on the print out
- ◆ Verify that the old reviewed panel appears in Panel History and that it can be called up from there
- ◆ Clear selected cells
- ◆ From the Options menu, select Customize result columns and set up columns for the way your lab generally tests (unevaluated columns with no check cells for Spin etc., columns without check cells for gel and so on).
- ◆ Select a lot with a search and open the Results worksheet to verify that the columns you set up have been established
- ◆ Select Panel 11 from Load Panel menu—follow the prompt to discard current work
- ◆ Verify that the columns for Panel 11 are the way they were before
- ◆ Clear all selected cells and search criteria

Scenario 18

- ◆ Log out and back in as a read-only user

- ◆ Confirm that you have read only ability by attempting save selected cells
- ◆ Log out and back in as a save panels user
- ◆ Confirm that you cannot review a saved panel, but can save one—check Panel History to verify.

#### Scenario 19

- ◆ While logged in as a save panels user
- ◆ Verify from system Options that you can view but are unable to change Exclusion Criteria
- ◆ Verify that you are unable to open “Customize result columns”
- ◆ Select a lot from the lot number drop down and select all cells
- ◆ Open the Results worksheet
- ◆ Confirm that the result columns conform to the specifications that you entered in Scenario 17
- ◆ Enter some random results
- ◆ Confirm that you are unable to review the panel
- ◆ Enter a new patient and save the panel with the number that appears in the panel number box
- ◆ Clear all selected cells and search criteria
- ◆ Log out and log back in as a full user

#### Scenario 20

- ◆ From Load Saved Panel, select panel number 11
- ◆ Open the Results worksheet and confirm from the View menu that all the histories conform to the work you have done on this panel up to now. Record any inconsistencies.
- ◆ From the Save Panel menu enter the conclusion of Anti-E and Anti-C and save the panel
- ◆ Confirm that the Conclusion now appears on the screen with the patient
- ◆ Right click on the patient name and select view patient details
- ◆ Click on edit and enter phenotype details in the array
- ◆ Type Phenotype in the reason box and Save
- ◆ Confirm that the phenotype criteria now appear in the Auto control row
- ◆ Close the Results worksheet and confirm that the patient phenotype appears under the patient's name on the screen
- ◆ Clear all selected cells and search criteria

#### Scenario 21

- ◆ This installation disk (or Validation database in the Cloud version) contains sample lots for validation testing. These are the same lots used for our internal unit testing, and are carefully selected to exercise all parts of the evaluation code. Every release of the software has these steps performed automatically.
- ◆ In the Options Menu change the Exclusion criteria to the default settings
- ◆ In the Options Menu Customize Result columns by deleting all columns except the IAT and removing the check cell requirement from that remaining column.

- ◆ To use these files:
- ◆ Use the File > Import Data command in Antigen Plus to import the .PNL files in this folder
- ◆ Search for one of the lots by name, select all cells, and open the Results Worksheet from the Panel menu.
- ◆ Enter the same test results in Antigen Plus that you see in corresponding Test Panel image reproduced below (pp 12-31).
- ◆ Verify that the rule-out counts and evaluation text are the same as in the image.
- ◆ Close the Results Worksheet and clear the selected cells.
- ◆ Repeat steps 2-6 for the other lots up to #27.
- ◆ Change your exclusion criteria to 4 for P1 and Xga and 2 for all the others and then enter the pictured results for #28.
- ◆ Change your exclusion criteria to

**Exclusion criteria**

Specify the minimum number of rule-outs needed to exclude each antigen. These minimums must meet or exceed current Antigen Plus standards (3 rule outs for P1 and Xga, and 1 rule-out for other antigens taking dosage into account). Antigen Plus standards are based on AABB standards and best practices.

These settings apply only to newly created panels. Older panels will continue using the standards in effect at the time they were created.

Rh-Hr								Kell				Duffy		Kidd		Lewis		P	MN				Luth		Sex		
D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	1	2	3	2	2	2	2	2	2	3

Restore defaults OK Cancel

- ◆ Repeat steps 2-6.

## Scenario 22

- ◆ The except for the final one, checks performed in Scenario 21 are based on the minimum exclusion criteria available to Antigen Plus. Keeping the current Options/Exclusion Criteria select the test panel Panel 10—Anti\_E\_K\_Fya\_IAT and enter the same results. Note that the S is no longer excluded and has changed to orange on the single dose exclusion row. Go back to then search screen and select a cell that is negative for E, Cw, K, Fya, Jka, and positive for S and negative for s (if you don't have such a cell it is currently available in Immucor lots 04113 and 39327, BioTest lot 805011 or Ortho lot 8RA24349 all of which are currently downloadable—or you can create such a test cell on the Add screen). Select that cell, go back to the worksheet and enter a negative result. Big S should no longer be orange and will be excluded. You may repeat this kind of scenario with as many panel and results as you like, but one is sufficient to show that the program functions are working.

## INTERPRETATION

Acceptable result criteria:

1. There will be no difference between the supplier antigram and the program printout by lot # once the panel has been transferred electronically into the Antigen Plus database.
2. Once marked out-of-stock, the cell(s) should not appear in a Search or on the panel printed by lot number.
3. Once deleted, there should be no record of the donor # in the program.
4. Once deleted, there should be no record of the panel lot # in the program.
5. Donors or lots saved with a patient may not be deleted but may be marked out-of-stock
6. All identical data should be reproduced in exactly the same manner and contain identical information if selected in exactly the same manner.
7. Cell information must be identical whether the cell appears on a lot # panel or on a Result panel. All print functions should print the information required in the correct format and there must be no altering of data between formats.
8. The out-of-date designation will appear when appropriate and be noted on the results panel and on the Search screen.
9. All Weiner phenotypes will produce the correct antigen types when selected (for manual data entry only).
10. The data in the original printout and the data in the printout produced from the same panel being saved and reloaded will be identical.
11. Only frozen cells will appear in the search results and the printout will carry the FZN designation for each frozen cell. The results panel used to test these cells will also show the FZN designation.
12. The Evaluations must be correct according to the Exclusion Policy located under Help. Specifically, there may be no exclusions of -K under DTT testing, and no exclusion of -Fy<sup>a</sup> under ENZ testing.
13. The Evaluations must show that for Scenario 13, in the first printout K, Kp<sup>a</sup> and Js<sup>a</sup> were properly ruled out and accurately counted, and that in the second printout none of these were ruled out.
14. All patient data will be maintained with saved panels
15. Only an administrator can remove someone else's review or edit patient data.
16. Testing history is be maintained by user and date accessible in the Results Worksheet View Menu under Technologists and Panel History
17. All test panel results should agree with the images provided.

## **11.0 RESULT REPORTING**

All documentation produced by the validation scenarios will be saved as part of the program's validation record.

## **12.0 LIMITATIONS**

As with any software program, it is only as good as the staff that maintains it. Maintenance is critical to the function of the program.

A hazard analysis will be developed based on all information gained while performing the program validation in the laboratory setting.

## **12.0 REFERENCES**

*AABB Technical Manual, 17<sup>th</sup> Edition, (ch 16: pg 470-1)*



Standards for Immunohematology Reference Laboratories, 6<sup>th</sup> edition. Bethesda, MD: The data in the original printout and the data in the printout produced from the same panel being saved and reloaded will be identical.

Standards for Blood Banks and Transfusion Services, 26<sup>th</sup> edition. Bethesda, MD: American Association of Blood Banks, 2009.

User's Manual, Version 8, Antigen Plus. Rony Systems Inc. Gaithersburg, MD: 2013.

\_\_\_\_\_  
DATE \_\_\_\_\_

\_\_\_\_\_  
DATE \_\_\_\_\_

DATE

DATE

Signatures on file

**WORK RECORD**

PERFORMED BY

DATE

REVIEWED

DATE

\_\_\_\_\_  
ACCEPTED BY

\_\_\_\_\_  
DATE

SIGNATURES ON FILE.

## Test Panel 1-- All Negative

**Selected Panel Test Results**

File View Patient Help

Specimen #:

Panel AllNegative

Select/Add Patient...

☐ Review 1  
☐ Review 2

Click in Results Box to indicate test outcome.

Supplier / Lot #	Donor / RhHr-Val	Rh-Hr				Kell				Duffy		Kidd	Lewis	P	MN	Luth	Sex	Additional Antigens	IAT	A	DTT	Enz																
		D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>									
1	Validation AllNegative #1	+	+	0	0	+	0			0	0	+	0	+	0	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	0	0	0	0	0	
2	Validation AllNegative #2	+	+	0	0	+	+			0	0	+	0	+	0	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	0	0	0	
3	Validation AllNegative #3	+	0	+	+	0	0			0	0	+	0	+	0	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	0	0	0
4	Validation AllNegative #4	+	0	0	+	+	0			+	0	+	0	+	0	+	0	+	0	+	+	+	+	+	+	+	0	0	+	0	+	+	+	+	0	0	0	0
5	Validation AllNegative #5	0	+	0	+	+	0			0	0	+	0	+	0	+	+	0	+	+	+	+	+	+	+	+	0	0	+	0	+	+	+	+	0	0	0	0
6	Validation AllNegative #6	0	0	+	+	+	0			0	0	+	0	+	0	+	+	0	+	+	+	+	+	+	+	+	0	0	+	0	+	+	+	+	0	0	0	0
7	Validation AllNegative #7	0	0	0	+	+	0			0	0	+	0	+	0	+	+	0	+	+	+	+	+	+	+	+	0	0	+	0	+	+	+	+	0	0	0	0
8	Validation AllNegative #8	0	0	0	+	+	0			0	0	+	0	+	0	+	+	0	+	+	+	+	+	+	+	+	0	0	+	0	+	+	+	+	0	0	0	0
9	Validation AllNegative #9	0	0	0	+	+	0			0	0	+	0	+	0	+	+	0	+	+	+	+	+	+	+	+	0	0	+	0	+	+	+	+	0	0	0	0
10	Validation AllNegative #10	+	+	0	0	+	0			0	0	+	0	+	0	+	+	0	+	+	+	+	+	+	+	+	0	0	+	0	+	+	+	+	0	0	0	0
11	Validation AllNegative #11	+	0	+	+	+	0			0	0	+	0	+	0	+	+	0	+	+	+	+	+	+	+	+	0	0	+	0	+	+	+	+	0	0	0	0
	Auto Control																																					

  

		Rh-Hr				Kell				Duffy		Kidd	Lewis	P	MN	Luth	Sex													
		D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>	
Homozygous Rule Outs	Double Dose	6	3	1	7	8	1	0		1	0	9	0	11	0	11	3	6	2	3	5	6	9	3	3	1	7	0	10	7
Heterozygous Rule Outs	Single Dose	0	0							2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			

☐ No exclusion yet    ☐ No exclusion possible

The following have insufficient negative reactions to exclude by your rules: f, Kpa, Jsa  
 Column IAT: can not exclude f, Kpa, Jsa  
 Column A: can not exclude f, Kpa, Jsa  
 Column DTT: can not exclude f, K, k, Kpa, Kpb, Jsa, Jsb, Lua, Lub  
 Column Enz: can not exclude f, Kpa, Jsa, Fya, Fyb, M, N, S, s, Xga  
 These are tentative rule-outs.  
 Additional confirmatory data based on your own criteria are recommended.

## Test Panel 2-- All Negative

**Selected Panel Test Results**

File View Patient Help

Specimen #:

Panel AllNegative2

Select/Add Patient...

☐ Review 1  
☐ Review 2

Click in Results Box to indicate test outcome.

Supplier / Lot #	Donor / RhHr-Val	Rh-Hr				Kell				Duffy		Kidd	Lewis	P	MN	Luth	Sex	Additional Antigens	IAT	A	DTT	Enz															
		D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>								
1	Validation AllNegative2 #1	+	0	+	+	0	0			0	0	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	0	0	+	0	+	0	0	0	0	0	
2	Validation AllNegative2 #2	+	0	0	+	+	0			+	0	+	+	0	+	+	+	0	0	+	0	0	0	+	+	0	+	0	+	0	+	+	+	0	0	0	0
	Auto Control																																				

  

		Rh-Hr				Kell				Duffy		Kidd	Lewis	P	MN	Luth	Sex														
		D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>		
Homozygous Rule Outs	Double Dose	2	0	1	2	1	0	1		0	2	0	1	0	1	0	0	0	0	1	0	1	0	2	1	1	1	1	0	2	1
Heterozygous Rule Outs	Single Dose	0	0							0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

☐ No exclusion yet    ☐ No exclusion possible

The following have insufficient negative reactions to exclude by your rules: C, Kw, K, Fya, Fyb, Jkb, Leb, P1, Lua, Xga  
 Column IAT: can not exclude C, Kw, K, Fya, Fyb, Jkb, Leb, P1, Lua, Xga  
 Column A: can not exclude C, Kw, K, Fya, Fyb, Jkb, Leb, P1, Lua, Xga  
 Column DTT: can not exclude C, Kw, K, Kpa, Kpb, Jsa, Jsb, Fya, Fyb, Jkb, Leb, P1, Lua, Lub, Xga  
 Column Enz: can not exclude C, Kw, K, Fya, Fyb, Jkb, Leb, P1, M, N, S, s, Lua, Xga  
 These are tentative rule-outs.  
 Additional confirmatory data based on your own criteria are recommended.

Selected Panel Test Results
File View Patient Help

Specimen #:

Panel AINegative3

Select/Add Patient...

☐ Review 1  
☐ Review 2  

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Val	Rh-Hr								Kell				Duffy	Kidd	Lewis	P	MN	Luth	Sex	Additional Antigens	IAT	A	DTT	Enz									
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>						Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
1	Validation AINegative3	Donor93 #1	+	+	0	0	+	0	0	0	+	0	+	0	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+		0	0	0	0
2	Validation AINegative3	Donor94 #2	+	+	0	0	+	+	0	0	+	0	+	0	+	+	0	+	0	+	+	0	+	+	0	+	0	+	+	0	+	0	0	0	
3	Validation AINegative3	Donor95 #3	+	0	+	+	0	0	0	0	+	0	+	0	+	0	+	+	0	+	+	0	+	0	+	0	+	+	+	0	+	0	0	0	
4	Validation AINegative3	Donor96 #4	+	+	0	0	+	+	0	+	+	0	+	+	0	0	+	0	0	+	+	+	0	+	+	0	0	+	0	+	0	0	0	0	
5	Validation AINegative3	Donor97 #5	0	0	+	+	0	0	0	0	+	0	+	0	+	0	+	+	+	0	+	+	0	+	+	0	+	0	+	0	0	0	0	0	
6	Validation AINegative3	Donor98 #6	0	0	+	+	+	0	0	0	+	0	+	0	+	0	+	0	+	0	+	+	0	+	+	0	+	0	+	0	0	0	0	0	
7	Validation AINegative3	Donor99 #7	0	0	0	+	+	0	0	+	+	0	+	0	+	0	+	0	+	+	+	0	+	+	0	+	0	+	0	+	0	0	0	0	
8	Validation AINegative3	Donor100 #8	0	0	0	+	+	0	0	0	+	0	+	0	+	+	0	+	+	+	0	0	+	+	0	+	0	+	0	+	0	0	0	0	
9	Validation AINegative3	Donor101 #9	0	0	0	+	+	0	0	0	+	0	+	0	+	0	+	0	+	+	+	0	+	+	0	+	0	+	0	+	0	0	0	0	
10	Validation AINegative3	Donor102 #10	+	+	0	0	0	0	0	+	+	0	+	0	+	0	+	+	0	+	+	+	0	+	+	0	+	0	+	0	0	0	0	0	
11	Validation AINegative3	Donor103 #11	+	0	+	+	+	0	0	0	+	0	+	0	+	0	+	+	+	0	+	+	0	+	+	0	+	0	+	0	0	0	0	0	
12	Validation AINegative3	Donor104 #12	+	0	+	+	0	0	0	0	+	+	0	+	+	+	+	+	+	0	+	+	0	+	+	0	0	0	+	0	0	0	0	0	
13	Validation AINegative3	Donor105 #13	+	0	0	+	+	0	+	+	0	+	0	+	+	0	0	0	0	+	0	+	0	+	0	+	0	+	0	+	0	0	0	0	
<i>Note Control</i>																																			
			Rh-Hr								Kell				Duffy	Kidd	Lewis	P	MN				Luth	Sex											
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>																

## Test Panel 4—AllPosAutoPos

Selected Panel Test Results

FileViewPatientHelp

Specimen #:

Panel AllPosAutoPos

Select/Add Patient...

Review 1

Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhH-Val	Rh-Hr							Kell					Duffy		Kidd		Lewis		P		MN		Luth		Sex	Additional Antigens	IAT	
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S				s
1	Validation AllPosAutoPos	Donor186 #1	+	+	0	0	+	0	0	0	+	0	+	0	+	+	0	+	+	0	+	0	0	+	0	+	0	+	0	1+
2	Validation AllPosAutoPos	Donor187 #2	+	+	0	0	+	+	0	0	+	0	+	0	+	+	0	+	+	0	+	+	+	+	+	0	+	+	+	1+
3	Validation AllPosAutoPos	Donor188 #3	+	0	+	+	+	0	0	0	+	0	+	0	+	+	0	+	+	0	+	+	+	0	+	+	+	+	+	1+
4	Validation AllPosAutoPos	Donor189 #4	+	0	0	+	+	0	+	0	+	0	+	0	+	0	0	+	0	+	+	+	0	+	0	0	+	0	+	1+
5	Validation AllPosAutoPos	Donor190 #5	0	+	0	+	+	0	0	0	+	0	+	0	+	0	+	+	+	0	+	+	+	0	+	+	0	+	0	1+
6	Validation AllPosAutoPos	Donor191 #6	0	0	+	+	+	0	0	0	+	0	+	0	+	0	+	+	0	+	+	+	0	+	0	+	0	+	+	1+
7	Validation AllPosAutoPos	Donor192 #7	0	0	0	+	+	0	0	+	0	+	0	+	0	+	0	+	0	+	+	+	+	0	+	0	+	+	+	1+
8	Validation AllPosAutoPos	Donor193 #8	0	0	0	+	+	0	0	0	+	0	+	0	+	0	+	+	+	0	0	+	+	0	+	0	+	0	+	1+
9	Validation AllPosAutoPos	Donor194 #9	0	0	0	+	+	0	0	0	+	0	+	0	+	0	+	0	+	0	+	+	0	+	0	+	0	+	+	1+
10	Validation AllPosAutoPos	Donor195 #10	+	+	0	0	+	0	0	+	0	+	0	+	0	+	+	+	0	+	+	+	+	0	+	0	+	+	+	1+
11	Validation AllPosAutoPos	Donor196 #11	+	0	+	+	+	0	0	0	+	0	+	0	+	0	+	+	+	0	+	+	+	0	+	0	+	+	+	1+
	Auto Control																												2+	

		Rh-Hr								Kell				Duffy		Kidd		Lewis		P	MN			Luth		Se		
		D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
Homozygous Rule Outs	Double Dose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Single Dose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterozygous Rule Outs		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Evaluation: ☐ No exclusion yet ☐ No exclusion possible

The following have insufficient negative reactions to exclude by your rules: D, C, E, c, e, C<sup>W</sup>, f, V, K, k, Kp<sup>a</sup>, Kp<sup>b</sup>, Jk<sup>a</sup>, Jk<sup>b</sup>, Fy<sup>a</sup>, Fy<sup>b</sup>, Le<sup>a</sup>, Le<sup>b</sup>, P1, M, N, S, s, Lu<sup>a</sup>, Lu<sup>b</sup>, Xg<sup>a</sup>.  
NO ANTIGENS CAN BE RULED OUT AS ALL CELLS TESTED ARE REACTIVE WITH THE PATIENT'S PLASMA. SEE TECH TIPS FOR FURTHER TESTING SUGGESTIONS.  
These are tentative rule-outs.  
Additional confirmatory data based on your own criteria are recommended.  
Auto Control Warning: Possible autoantibody present.  
Do DAT to determine if sensitization occurred in vivo or in vitro.

## Test Panel 5—AllPositive

Selected Panel Test Results																										
File View Patient Help																										
Specimen #: <input type="text"/>																										
Panel AllPositive																										
Select/Add Patient...																										
Supplier / Lot #	Donor / RhH-Val	Rh-Hr					Kell					Duffy		Kidd		Lewis		P		MN		Luth		Sex	Additional Antigens	IAT
		D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>	
1	Validation AllPositive	Donor69 #1	+	+	+	0	+	0	0	0	+	0	+	+	+	+	0	+	0	+	0	0	+	+	+	2+
2	Validation AllPositive	Donor70 #2	+	+	0	0	+	+	0	0	0	+	0	+	+	+	0	+	+	+	+	+	0	+	+	2+
3	Validation AllPositive	Donor71 #3	+	0	+	+	0	0	0	0	0	+	0	+	+	0	+	+	+	+	0	0	+	+	+	2+
4	Validation AllPositive	Donor72 #4	+	+	0	+	+	0	0	0	+	0	+	+	+	0	0	+	+	+	+	0	0	+	0	2+
5	Validation AllPositive	Donor73 #5	0	+	0	+	+	0	0	0	+	0	+	+	+	0	+	+	+	+	0	0	0	+	+	2+
6	Validation AllPositive	Donor74 #6	0	0	+	+	+	0	0	0	+	0	+	+	+	0	+	+	+	+	0	0	0	+	+	2+
7	Validation AllPositive	Donor75 #7	0	0	0	+	+	0	0	0	+	0	+	+	+	0	+	+	+	+	0	0	0	+	+	2+
8	Validation AllPositive	Donor76 #8	0	0	0	+	+	0	0	0	+	0	+	+	+	0	+	+	+	+	0	0	0	+	+	2+
9	Validation AllPositive	Donor77 #9	0	0	0	+	+	0	+	0	0	+	+	+	+	0	+	+	+	+	0	0	0	+	0	2+
10	Validation AllPositive	Donor78 #10	0	0	+	+	+	0	0	0	+	0	+	+	0	0	0	+	+	+	0	0	0	+	+	2+
11	Validation AllPositive	Donor79 #11	+	0	0	+	+	0	0	0	+	0	+	+	0	+	+	+	+	+	0	0	0	+	+	2+
	Auto Control																									

		Rh-Hr								Kell				Duffy		Kidd		Lewis		P	MN			Luth		Sex
		D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xp <sup>a</sup>	Xp <sup>b</sup>
	Homozygous Rule Outs	Double Dose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Heterozygous Rule Outs	Single Dose	0	0						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Evaluation: ☐ No exclusion yet ☐ No exclusion possible

The following have insufficient negative reactions to exclude by your rules: D, C, E, c, e, C<sup>W</sup>, f, V, K, k, Kp<sup>a</sup>, Kp<sup>b</sup>, Jk<sup>a</sup>, Jk<sup>b</sup>, Fy<sup>a</sup>, Fy<sup>b</sup>, Le<sup>a</sup>, Le<sup>b</sup>, P1, M, N, S, s, Lu<sup>a</sup>, Lu<sup>b</sup>, Xg<sup>a</sup>.  
NO ANTIGENS CAN BE RULED OUT AS ALL CELLS TESTED ARE REACTIVE WITH THE PATIENT'S PLASMA. SEE TECH TIPS FOR FURTHER TESTING SUGGESTIONS.  
These are tentative rule-outs.  
Additional confirmatory data based on your own criteria are recommended.

Article I.

## Test Panel 6—Anti\_D

Selected Panel Test Results

File View Patient Help

Specimen #:

Panel Anti\_D

Select/Add Patient...

☐ Review 1  
☐ Review 2  

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Val	Rh-Hr					Kell					Duffy		Kidd	Lewis		P	MN			Luth		Sex	Additional Antigens	IAT			
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M			N	S	s
1	Validation Anti_D	Donor15 #1	+	+	0	0	+	+	0	0	+	0	+	0	+	0	+	0	+	+	0	+	0	+	0	+	+		2+
2	Validation Anti_D	Donor16 #2	0	0	0	+	+	0	0	+	+	0	+	0	+	0	+	0	+	0	+	+	0	+	+	0	+	0	0
3	Validation Anti_D	Donor17 #3	+	+	0	0	+	+	0	0	+	+	0	+	0	+	0	+	+	0	+	+	0	0	+	0	+	0	2+
4	Validation Anti_D	Donor18 #4	+	0	+	+	0	0	0	0	+	0	+	0	+	0	+	+	0	+	+	0	+	+	+	0	+	+	2+
5	Validation Anti_D	Donor19 #5	0	0	0	+	+	0	0	0	+	+	+	0	+	+	W	+	0	0	+	0	+	+	+	0	0	0	
6	Validation Anti_D	Donor20 #6	0	0	0	+	+	0	0	+	+	0	+	+	+	+	+	+	+	0	+	0	+	+	0	+	+	0	
7	Validation Anti_D	Donor21 #7	0	+	0	+	+	0	+	0	0	+	0	+	+	+	+	+	+	0	+	+	0	+	+	0	+	0	
8	Validation Anti_D	Donor22 #8	0	0	+	+	+	0	+	0	0	+	0	+	+	0	0	0	0	S	+	0	0	+	0	+	+	0	
9	Validation Anti_D	Donor23 #9	0	0	0	+	+	0	+	0	0	+	0	+	+	+	0	0	0	+	+	0	+	0	0	0	+	0	
10	Validation Anti_D	Donor24 #10	0	+	0	+	+	0	+	0	0	+	0	+	+	+	+	0	+	W	+	+	0	+	0	+	+	0	
11	Validation Anti_D	Donor25 #11	0	0	+	+	+	0	+	0	0	+	0	+	0	+	0	+	+	+	+	0	0	+	0	+	0	0	
12	Validation Anti_D	Donor26 #12	0	0	0	+	+	0	+	0	0	+	+	+	+	0	+	+	+	0	+	+	+	0	+	0	+	0	
	Auto Control																												

  

	Supplier / Lot #	Donor / RhHr-Val	Rh-Hr					Kell					Duffy		Kidd	Lewis		P	MN			Luth		Sex						
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xp <sup>a</sup>
			0	0	0	7	7	0	5	1	0	7	0	8	0	6	3	1	4	2	4	4	8	4	2	3	4	0	8	3
			2	2						2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1				

No exclusion yet

No exclusion possible

The following have insufficient negative reactions to exclude by your rules: D, Cw

Column IAT: can not exclude D, Cw

These are tentative rule-outs.

Additional confirmatory data based on your own criteria are recommended.

**Selected Panel Test Results**

File View Patient Help

Specimen #:

Panel Anti\_E\_Cw\_Gel

Select/Add Patient...

☐ Review 1  
☐ Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Vial	Rh-Hr								Kell					Duffy	Kidd	Lewis	P	MN	Luth	Sex	Additional Antigens	A									
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>			P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>	
1	Validation Anti_E_Cw_Gel	Donor172 #1	+	+	0	0	+	+	0	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	+	+	3+	
2	Validation Anti_E_Cw_Gel	Donor173 #2	+	0	+	+	0	0	0	+	+	0	+	0	+	+	+	0	0	0	+	+	+	+	+	+	+	+	0	+	+	4+	
3	Validation Anti_E_Cw_Gel	Donor174 #3	+	+	0	+	+	0	+	0	+	0	+	0	+	0	+	0	0	+	0	+	+	+	+	+	+	+	+	+	+	0	
4	Validation Anti_E_Cw_Gel	Donor175 #4	0	0	0	+	+	0	+	0	0	+	0	+	0	+	+	+	+	0	+	+	+	+	+	+	+	+	+	+	+	0	
5	Validation Anti_E_Cw_Gel	Donor176 #5	+	+	0	+	+	+	+	0	+	0	0	+	0	+	+	+	0	0	+	0	0	+	0	+	0	+	+	+	+	3+	
6	Validation Anti_E_Cw_Gel	Donor177 #6	+	+	0	0	+	0	0	0	0	+	+	0	0	+	+	+	+	0	+	+	+	+	+	+	0	+	+	+	+	0	
7	Validation Anti_E_Cw_Gel	Donor178 #7	+	0	+	+	0	0	0	0	0	+	+	0	0	+	+	+	+	+	0	+	+	+	+	+	0	+	+	+	+	4+	
8	Validation Anti_E_Cw_Gel	Donor179 #8	+	+	0	0	+	+	0	0	0	0	0	+	+	0	0	0	0	0	0	0	0	+	0	+	0	+	+	+	+	3+	
9	Validation Anti_E_Cw_Gel	Donor180 #9	+	0	0	+	+	0	+	+	0	+	0	+	+	0	+	0	0	0	+	0	+	0	+	0	+	0	+	+	+	0	
10	Validation Anti_E_Cw_Gel	Donor181 #10	0	0	0	+	+	0	+	+	0	+	+	0	+	0	+	0	+	+	0	+	+	0	+	+	0	+	+	+	+	0	
11	Validation Anti_E_Cw_Gel	Donor182 #11	0	0	+	+	+	0	+	0	0	+	0	+	0	+	+	0	+	0	+	+	+	+	0	+	+	+	+	+	+	3+	
12	Validation Anti_E_Cw_Gel	Donor183 #12	+	+	0	0	+	0	0	+	+	0	+	0	+	0	+	0	+	0	+	+	+	+	+	0	+	0	+	+	+	0	
13	Validation Anti_E_Cw_Gel	Donor184 #13	+	+	+	+	+	0	0	0	+	0	+	0	+	+	0	+	0	+	0	0	+	+	+	+	0	+	+	+	+	3+	
14	Validation Anti_E_Cw_Gel	Donor185 #14	+	+	0	0	+	0	0	+	+	0	+	0	+	+	+	+	0	+	0	0	+	0	+	0	0	0	+	+	+	+	0
	Auto Control																																
			Rh-Hr								Kell					Duffy	Kidd	Lewis	P	MN	Luth	Sex											
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>			
	Homozygous Rule Outs	Double Dose	5	3	0	3	7	0	4	1	0	3	1	6	0	6	1	2	3	2	3	3	4	1	1	1	3	0	5	7			



### Test Panel 8—Anti\_E\_K\_Fya DTT

File

View

Patient

Help

Specimen #:

Panel Anti\_E\_K\_Fya\_Enz

Select/Add Patient...

Review 1

Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Vial	Rh-Hr								Kell					Duffy		Kidd	Lewis	P	MN				Luth	Sex	Additional Antigens	Enz				
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S			s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
1	Validation Anti_E_K_Fya_Enz	Donor41 #1	+	0	+	+	0	0		0	0	+	0	+	0	+	0	+	0	+	+	0	0	+	+	+	+	0	+	+		2+
2	Validation Anti_E_K_Fya_Enz	Donor42 #2	+	+	0	0	+	0		0	0	+	0	+	0	+	0	+	+	+	+	0	+	+	0	+	0	0	+	+		0
3	Validation Anti_E_K_Fya_Enz	Donor43 #3	+	0	+	+	0	0		0	+	+	0	+	0	+	+	+	+	0	0	0	+	+	+	+	+	+	+	0		2+
4	Validation Anti_E_K_Fya_Enz	Donor44 #4	+	+	0	0	+	+		0	0	+	0	+	0	+	+	0	0	+	+	0	0	+	+	+	0	0	+	+		0
5	Validation Anti_E_K_Fya_Enz	Donor45 #5	0	0	0	+	+	0		0	0	+	+	+	0	+	0	+	+	0	0	+	+	0	+	0	+	0	+	+		0
6	Validation Anti_E_K_Fya_Enz	Donor46 #6	0	0	0	+	+	0		0	+	+	0	+	0	+	0	+	+	+	+	0	+	+	+	+	0	0	+	0		2+
7	Validation Anti_E_K_Fya_Enz	Donor47 #7	+	0	+	+	0	0		0	0	+	0	+	0	+	0	+	0	0	+	+	0	+	+	0	0	+	0	+		2+
8	Validation Anti_E_K_Fya_Enz	Donor48 #8	+	+	0	+	+	0		0	0	+	+	+	0	+	0	+	0	0	+	+	+	0	+	0	0	+	0	+		0
9	Validation Anti_E_K_Fya_Enz	Donor49 #9	+	+	0	0	+	0		0	0	+	0	+	0	+	0	0	+	0	+	0	0	+	0	+	0	0	+	+		0
10	Validation Anti_E_K_Fya_Enz	Donor50 #10	+	0	+	+	0	0		0	0	+	0	+	0	+	0	+	+	0	0	+	+	+	0	+	0	0	+	0		2+
11	Validation Anti_E_K_Fya_Enz	Donor51 #11	0	0	0	+	+	0		0	+	+	0	+	0	+	0	+	+	+	+	0	0	0	+	0	+	0	+	+		2+
12	Validation Anti_E_K_Fya_Enz	Donor52 #12	+	0	0	+	+	0	+	0	+	0	+	+	+	0	0	+	0	0	0	+	0	+	0	+	0	+	0	+		0
13	Validation Anti_E_K_Fya_Enz	Donor53 #13	0	0	0	+	+	0	+	0	+	+	0	+	0	+	0	+	+	0	0	+	+	0	+	+	0	0	+	+		2+
14	Validation Anti_E_K_Fya_Enz	Donor54 #14	0	0	0	+	+	0	+	0	0	+	0	+	0	+	0	+	+	0	0	+	0	s	+	+	0	+	+	+		0
Auto Control																																
			Rh-Hr								Kell					Duffy		Kidd	Lewis	P	MN				Luth	Sex						
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>		
	Homozygous Rule Outs	Double Dose	5	3	0	3	7	1	2	1	0	7	0	5	0	6	0	0	4	2	3	3	5	0	0	0	0	0	6	0		
	Heterozygous Rule Outs	Single Dose		0	0						0		2		1		0		0					0		0		1				

No exclusion yet

No exclusion possible

The following have insufficient negative reactions to exclude by your rules: E, K, Fya, Fyb, M, N, S, s, Xga

Column Enz: can not exclude E, K, Fya, Fyb, M, N, S, s, Xga

These are tentative rule-outs.

Additional confirmatory data based on your own criteria are recommended.

Test Panel 10—Anti E K Fya IAT

Evaluation: ☐ No exclusion yet ☐ No exclusion possible  
 The following have insufficient negative reactions to exclude by your rules: E, Cw, K, Fya, Jkb  
 Column IAT: can not exclude E, Cw, K, Fya, Jkb  
 These are tentative rule-outs.  
 Additional confirmatory data based on your own criteria are recommended.

Evaluation: ☐ No exclusion yet ☐ No exclusion possible  
**No specificity detected. Further testing required.**  
 See tech tips for further testing suggestions.  
 Review patient history.

**Selected Panel Test Results**

File View Patient Help

Specimen #:

Panel Anti\_Jka\_S

Select/Add Patient...

☐ Review 1  
☐ Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Val	Rh-Hr								Kell						Duffy		Kidd	Lewis	P	MN	Luth	Sex	Additional Antigens	IAT							
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M			N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>	
1	Validation Anti_Jka_S	Donor1 #1	+	0	+	+	0	0	0	0	+	0	+	0	+	0	+	0	+	0	0	+	+	+	+	+	+	0	+	+		1+	
2	Validation Anti_Jka_S	Donor2 #2	+	+	0	0	+	+	0	0	+	0	+	0	+	0	+	0	+	0	0	+	+	+	+	+	+	0	0	+	+		2+
3	Validation Anti_Jka_S	Donor3 #3	0	0	0	+	+	0	0	0	+	+	+	0	+	0	+	0	+	0	0	+	+	0	+	0	+	0	+	+		1+	
4	Validation Anti_Jka_S	Donor4 #4	+	0	+	+	0	0	0	w	+	0	+	0	+	0	+	0	+	0	0	+	+	0	+	0	+	0	+	+		1+	
5	Validation Anti_Jka_S	Donor5 #5	0	0	0	+	+	0	0	+	+	0	+	0	+	+	+	0	+	0	+	0	+	0	+	0	+	0	+	+		2+	
6	Validation Anti_Jka_S	Donor6 #6	+	0	0	+	+	0	+	+	0	0	0	0	0	+	0	+	+	+	0	w	+	+	0	+	0	+	+		0		
7	Validation Anti_Jka_S	Donor7 #7	+	+	0	0	+	0	0	0	+	+	0	0	0	+	+	+	0	+	0	+	0	+	0	0	+	0	+	+		0	
8	Validation Anti_Jka_S	Donor8 #8	+	0	+	+	0	0	0	0	+	0	+	0	+	0	+	0	+	0	+	+	+	0	+	0	+	0	+	+		0	
9	Validation Anti_Jka_S	Donor9 #9	+	+	0	0	+	+	0	0	0	+	0	+	0	+	+	+	+	0	+	+	+	+	0	+	0	+	0		0		
10	Validation Anti_Jka_S	Donor10 #10	0	0	+	+	+	0	+	0	0	+	0	+	+	+	+	+	0	+	+	+	0	0	+	0	+	0	+		0		
11	Validation Anti_Jka_S	Donor11 #11	0	0	0	+	+	0	+	0	+	+	0	+	0	+	0	+	0	+	0	+	+	+	0	+	0	+	0		0		
12	Validation Anti_Jka_S	Donor12 #12	0	0	0	+	+	0	0	+	+	0	+	0	+	0	+	0	+	0	+	+	+	+	0	+	+	+	0		0		
13	Validation Anti_Jka_S	Donor13 #13	0	0	0	+	+	0	+	0	0	+	0	+	+	+	0	0	+	+	+	+	0	0	+	0	+	0	+		0		
14	Validation Anti_Jka_S	Donor14 #14	+	0	0	+	+	0	0	0	+	+	+	0	0	0	0	0	+	0	+	+	+	+	0	+	0	+	+		0		
	Auto Control																																
	Homozygous Rule Outs	Double Dose	5	2	1	7	7	1	4	1	0	7	0	8	0	8	1	5	0	7	1	8	7	3	1	0	9	0	8	6			
	Heterozygous Rule Outs	Single Dose	0	0					</																								

## Test Panel 13—Anti\_K\_DTT

Selected Panel Test Results

File View Patient Help

Specimen #:

Panel Anti\_K\_DTT

Select/Add Patient...

☐ Review 1  
☐ Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Val	Rh-Hr								Kell				Duffy		Kidd	Lewis	P	MN			Luth		Sex	Additional Antigens	DTT				
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jsa <sup>a</sup>	Jsb <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N			S	s	Lu <sup>a</sup>	Lu <sup>b</sup>
1	Validation Anti_K_DTT	Donor128 #1	+	+	0	0	+	+	0	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	+	0
2	Validation Anti_K_DTT	Donor129 #2	+	0	+	+	0	0	0	0	+	+	+	+	+	+	+	+	0	+	+	0	+	0	+	0	+	0	+	0	
3	Validation Anti_K_DTT	Donor130 #3	0	0	0	+	+	0	0	0	+	+	0	+	+	0	+	0	+	0	+	+	+	+	0	+	+	0	+	0	
4	Validation Anti_K_DTT	Donor131 #4	+	+	+	+	+	+	0	0	0	+	+	0	+	+	0	+	0	+	0	+	+	0	+	+	+	0	+	0	
5	Validation Anti_K_DTT	Donor132 #5	+	0	+	+	+	0	+	+	0	+	+	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	
6	Validation Anti_K_DTT	Donor133 #6	+	0	0	+	+	0	+	+	0	+	+	+	0	0	+	0	0	0	+	0	+	0	+	0	+	0	+	+	
7	Validation Anti_K_DTT	Donor134 #7	0	0	0	+	+	0	+	0	+	0	0	0	+	+	0	+	0	0	W	0	+	0	+	0	+	0	+	+	
8	Validation Anti_K_DTT	Donor135 #8	+	+	0	0	+	0	0	+	+	0	+	0	+	0	+	0	+	0	+	+	0	+	+	0	+	0	+	0	
9	Validation Anti_K_DTT	Donor136 #9	+	+	0	0	+	+	0	0	+	0	+	0	+	+	+	+	+	0	+	0	+	0	+	+	+	+	+	0	
10	Validation Anti_K_DTT	Donor137 #10	+	0	+	+	0	0	0	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	
11	Validation Anti_K_DTT	Donor138 #11	0	0	0	+	+	0	0	0	+	+	0	+	+	0	0	+	0	+	+	+	+	+	+	+	0	+	+	+	
	Auto Control																														

  

			Rh-Hr								Kell				Duffy		Kidd	Lewis	P	MN			Luth		Sex					
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jsa <sup>a</sup>	Jsb <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
	Homozygous Rule Outs	Double Dose	8	3	2	7	7	3	3	2	0	0	0	0	0	0	2	5	6	3	5	5	9	3	6	2	6	0	0	5
	Heterozygous Rule Outs	Single Dose	0	0							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

No exclusion yet

No exclusion possible

The following have insufficient negative reactions to exclude by your rules: K, k, Kpa, Kpb, Jsa, Jsb, Lua, Lub

Column DTT: can not exclude K, k, Kpa, Kpb, Jsa, Jsb, Lua, Lub

These are tentative rule-outs.

Additional confirmatory data based on your own criteria are recommended.

## Test Panel 14—Anti\_K\_Enz

File View Patient Help

Specimen #:

Panel Anti\_K\_Enz

Select/Add Patient...

☐ Review 1

☐ Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhH-Vial	Rh-Hr						Kell						Duffy		Kidd		Lewis		P		MN		Luth		Sex	Additional Antigens	Enz			
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S				s	Lu <sup>a</sup>	Lu <sup>b</sup>
1	Validation Anti_K_Enz	Donor117 #1	+	+	0	0	+	+	0	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0
2	Validation Anti_K_Enz	Donor118 #2	+	0	+	+	0	0	0	0	+	+	0	+	+	+	+	0	+	+	0	+	+	0	+	0	0	+	0	+	0	
3	Validation Anti_K_Enz	Donor119 #3	0	0	0	+	+	0	0	+	+	0	+	+	+	0	+	0	+	0	+	+	0	+	+	+	0	+	0	+	2+	
4	Validation Anti_K_Enz	Donor120 #4	+	+	+	+	+	0	0	0	+	+	0	+	0	+	0	+	0	+	0	+	+	0	+	+	0	+	0	+	0	
5	Validation Anti_K_Enz	Donor121 #5	+	0	+	+	+	0	+	0	+	0	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	0	+	0	0	
6	Validation Anti_K_Enz	Donor122 #6	+	0	0	+	+	0	+	0	+	0	+	+	0	0	+	0	0	0	0	+	0	+	0	+	0	+	0	+	0	
7	Validation Anti_K_Enz	Donor123 #7	0	0	0	+	+	0	0	+	0	+	0	0	+	+	0	+	0	W	0	+	0	+	0	+	0	+	0	+	2+	
8	Validation Anti_K_Enz	Donor124 #8	+	+	0	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	+	0	+	+	0	+	0	+	0	+	2+
9	Validation Anti_K_Enz	Donor125 #9	+	+	0	0	+	+	0	0	+	0	+	0	+	+	+	+	0	+	0	+	0	+	0	+	+	+	+	0	0	
10	Validation Anti_K_Enz	Donor126 #10	+	+	+	+	0	0	0	+	+	0	+	0	+	+	0	+	0	+	0	+	0	+	0	+	0	0	+	0	+	2+
11	Validation Anti_K_Enz	Donor127 #11	0	0	0	+	+	0	0	0	+	+	0	+	+	0	0	+	0	+	+	+	+	+	+	+	0	+	+	0	0	
	Auto Control																															

  

			Rh-Hr						Kell						Duffy		Kidd		Lewis		P		MN		Luth		Sex				
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S		s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
	Homozygous Rule Outs	Double Dose	6	2	1	4	4	3	2	2	0	7	0	4	0	5	0	0	0	2	3	2	4	6	0	0	0	0	5	0	0
	Heterozygous Rule Outs	Single Dose	0	0							0	2	1		0	0	0	0						0	0		1				

☐ No exclusion yet     ☐ No exclusion possible

**The following have insufficient negative reactions to exclude by your rules: K, Fya, Fyb, M, N, S, s, Xga**  
**Auto Enz: can not exclude K, Fya, Fyb, M, N, S, s, Xga**  
 These are tentative rule-outs.  
**Additional confirmatory data based on your own criteria are recommended.**

## Test Panel 15—Anti\_K\_Fyb\_DTT

Selected Panel Test Results

FileViewPatientHelp

Specimen #:

Panel Anti\_K\_Fyb\_DTT

Select/Add Patient...

Review 1

Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Vial	Rh-Hr							Kell				Duffy		Kidd	Lewis	P	MN				Luth	Sex	Additional Antigens	DTT			
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S			s	Lu <sup>a</sup>	Lu <sup>b</sup>
1	Validation Anti_K_Fyb_DTT	Donor161 #1	+	0	+	+	0	0	0	0	+	+	+	0	+	+	+	+	0	+	+	0	+	0	+	0	+	0	1+
2	Validation Anti_K_Fyb_DTT	Donor162 #2	+	0	+	+	0	0	0	0	+	+	0	+	+	+	+	0	0	0	+	+	+	+	+	+	+	0	1+
3	Validation Anti_K_Fyb_DTT	Donor163 #3	+	0	0	+	0	0	0	0	+	0	0	+	+	0	+	0	0	0	+	+	0	+	0	+	0	+	0
4	Validation Anti_K_Fyb_DTT	Donor164 #4	0	0	0	+	+	0	0	0	+	0	0	+	0	+	0	+	0	0	+	+	0	+	0	+	0	+	2+
5	Validation Anti_K_Fyb_DTT	Donor165 #5	+	+	0	+	+	+	+	0	+	0	0	+	+	+	+	0	0	0	0	0	+	0	+	+	+	+	1+
6	Validation Anti_K_Fyb_DTT	Donor166 #6	+	+	0	0	+	+	0	0	0	+	0	+	0	+	0	0	+	+	0	0	+	+	0	0	+	+	0
7	Validation Anti_K_Fyb_DTT	Donor167 #7	+	+	0	+	+	0	0	0	+	+	+	0	+	+	0	0	0	+	+	0	+	0	0	0	0	+	0
8	Validation Anti_K_Fyb_DTT	Donor168 #8	+	+	0	0	+	0	0	0	+	0	+	0	+	0	+	0	+	0	0	0	+	0	+	0	+	+	0
9	Validation Anti_K_Fyb_DTT	Donor169 #9	+	+	0	0	+	+	0	0	+	0	+	+	0	+	0	0	0	+	0	0	+	0	+	0	+	+	0
10	Validation Anti_K_Fyb_DTT	Donor170 #10	+	0	0	+	+	0	+	+	0	+	0	+	+	0	0	+	0	0	0	+	0	+	0	+	0	+	0
11	Validation Anti_K_Fyb_DTT	Donor171 #11	+	+	0	0	+	0	0	0	+	0	0	+	+	+	0	+	0	0	0	+	+	+	+	0	+	+	1+
	Auto Control																												

			Rh-Hr							Kell				Duffy		Kidd	Lewis	P	MN				Luth	Sex						
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>		
	Homozygous Rule Outs	Double Dose	6	4	0	1	6	2	1	1	0	0	0	0	0	0	5	0	4	2	2	3	2	1	3	2	4	0	0	5
	Heterozygous Rule Outs	Single Dose		0	0						0	0	0	0	0	0	0	0	0	0			0	0	0	0	0			

Evaluation:

No exclusion yet

No exclusion possible

The following have insufficient negative reactions to exclude by your rules: E, K, k, Kp<sup>a</sup>, Kp<sup>b</sup>, Jk<sup>a</sup>, Jk<sup>b</sup>, Fyb, P1, Lu<sup>a</sup>, Lu<sup>b</sup>

Column DTT: can not exclude E, K, k, Kp<sup>a</sup>, Kp<sup>b</sup>, Jk<sup>a</sup>, Jk<sup>b</sup>, Fyb, P1, Lu<sup>a</sup>, Lu<sup>b</sup>

These are tentative rule-outs.

Additional confirmatory data based on your own criteria are recommended.



## Test Panel 16—Anti\_K\_Fyb\_Enz

FileViewPatientHelp

Specimen #:

Panel Anti\_K\_Fyb\_Enz

Select/Add Patient...

Review 1

Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Val	Rh-Hr							Kell					Duffy		Kidd		Lewis		P	MN				Luth		Sex	Additional Antigens	Enz	
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>			Lu <sup>b</sup>
1	Validation Anti_K_Fyb_Enz	Donor150 #1	+	0	+	+	0	0	0	0	+	+	+	0	+	+	+	+	+	+	0	+	+	+	0	+	0	0	+	0	3+
2	Validation Anti_K_Fyb_Enz	Donor151 #2	+	0	+	+	0	0	0	0	+	+	0	0	+	+	+	+	+	0	0	0	+	+	+	+	+	+	+	0	2+
3	Validation Anti_K_Fyb_Enz	Donor152 #3	+	+	0	0	+	0	0	0	+	0	0	+	0	+	0	+	0	0	0	0	+	+	0	+	0	+	+	+	0
4	Validation Anti_K_Fyb_Enz	Donor153 #4	0	0	0	+	0	0	0	+	0	0	+	0	+	0	+	0	+	0	0	0	+	0	+	0	0	+	+	+	0
5	Validation Anti_K_Fyb_Enz	Donor154 #5	+	+	0	+	+	+	+	0	+	0	0	+	0	+	+	+	+	0	0	+	0	+	0	+	0	+	+	+	0
6	Validation Anti_K_Fyb_Enz	Donor155 #6	+	+	0	0	+	+	0	0	0	+	0	+	0	+	0	+	0	0	+	0	+	0	+	0	0	+	+	+	3+
7	Validation Anti_K_Fyb_Enz	Donor156 #7	+	+	0	+	+	0	0	0	+	+	+	0	+	+	0	+	0	0	+	+	0	+	0	+	0	0	+	+	3+
8	Validation Anti_K_Fyb_Enz	Donor157 #8	+	+	0	0	+	0	0	0	+	0	+	0	+	+	0	0	+	0	0	+	0	+	0	+	0	+	+	+	3+
9	Validation Anti_K_Fyb_Enz	Donor158 #9	+	+	0	0	+	+	0	0	0	+	0	+	+	+	0	+	0	+	0	0	+	0	+	0	+	0	+	+	3+
10	Validation Anti_K_Fyb_Enz	Donor159 #10	+	0	0	+	+	0	+	+	0	+	0	+	+	+	0	0	+	0	0	0	+	0	+	0	0	+	+	+	3+
11	Validation Anti_K_Fyb_Enz	Donor160 #11	+	+	0	0	+	0	0	+	0	0	+	0	+	+	+	+	0	0	0	0	+	+	+	+	0	+	+	0	0
	Auto Control																														

			Rh-Hr							Kell					Duffy		Kidd		Lewis		P	MN				Luth		Sex		
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
	Homozygous Rule Outs	Double Dose	3	2	0	1	4	1	1	0	4	0	0	4	0	4	0	0	3	1	2	2	0	0	0	0	0	3	0	
	Heterozygous Rule Outs	Single Dose	0	0						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			

No exclusion yet

No exclusion possible

The following have insufficient negative reactions to exclude by your rules: E, V, k, Kp<sup>a</sup>, Jsa, Fya, Fyb, P1, M, N, S, s, Xga  
Column Enz: can not exclude E, V, k, Kp<sup>a</sup>, Jsa, Fya, Fyb, P1, M, N, S, s, Xga  
These are tentative rule-outs.  
Additional confirmatory data based on your own criteria are recommended.

## Test Panel 17—Anti\_K\_Fyb\_IAT

Selected Panel Test Results

FileViewPatientHelp

Specimen #:

Panel Anti\_K\_Fyb\_IAT

Select/Add Patient...

Review 1

Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Val	Rh-Hr								Kell				Duffy		Kidd	Lewis	P	MN				Luth	Sex	Additional Antigens	IAT				
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N			S	s	Lu <sup>a</sup>	Lu <sup>b</sup>
1	Validation Anti_K_Fyb_IAT	Donor139 #1	+	0	+	+	0	0	0	0	+	+	+	0	+	+	+	+	+	+	+	+	0	+	+	0	0	+	0		3+
2	Validation Anti_K_Fyb_IAT	Donor140 #2	+	0	+	+	0	0	0	0	+	+	0	0	+	+	+	+	0	0	0	+	+	+	+	+	+	+	0		2+
3	Validation Anti_K_Fyb_IAT	Donor141 #3	+	+	0	0	+	0	0	0	0	0	0	0	+	0	+	0	+	0	0	0	+	+	0	+	0	+	+		0
4	Validation Anti_K_Fyb_IAT	Donor142 #4	0	0	0	+	+	0	0	0	0	0	0	+	0	+	0	+	0	+	0	0	+	+	0	0	+	+	+		2+
5	Validation Anti_K_Fyb_IAT	Donor143 #5	+	+	0	+	+	+	+	0	+	0	0	+	0	+	+	+	+	0	0	+	0	+	0	+	+	+	+	+	1+
6	Validation Anti_K_Fyb_IAT	Donor144 #6	+	+	0	0	+	+	0	0	+	0	+	0	+	+	0	+	0	+	+	0	+	+	+	0	0	+	+		3+
7	Validation Anti_K_Fyb_IAT	Donor145 #7	+	+	0	+	+	0	0	0	+	+	+	0	+	+	0	+	0	+	+	0	+	+	+	0	0	+	0		3+
8	Validation Anti_K_Fyb_IAT	Donor146 #8	+	+	0	0	+	0	0	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+		3+
9	Validation Anti_K_Fyb_IAT	Donor147 #9	+	+	0	0	+	+	0	0	0	+	0	+	+	+	0	+	0	+	0	+	0	+	0	+	0	+	+		3+
10	Validation Anti_K_Fyb_IAT	Donor148 #10	+	0	0	+	+	0	+	+	0	+	0	+	+	0	0	0	0	+	0	+	0	+	0	+	0	+	+		3+
11	Validation Anti_K_Fyb_IAT	Donor149 #11	+	+	0	0	+	0	0	+	0	0	+	0	+	+	+	+	0	0	0	+	+	+	+	0	+	+		1+	
	Auto Control																														

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Val	Rh-Hr								Kell				Duffy		Kidd	Lewis	P	MN				Luth	Sex					
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
	Homozygous Rule Outs	Double Dose	1	1	0	0	1	0	0	0	1	0	0	1	0	1	1	0	1	0	0	1	0	0	0	0	1	0	1	1
	Heterozygous Rule Outs	Single Dose	0	0						0		0	0	0	0	0	0	0		0	0	0	0	0	0	0				

No exclusion yet

No exclusion possible

The following have insufficient negative reactions to exclude by your rules: E, c, Cw, f, V, k, Kpa, Jsa, Fyb, Jkb, Leb, P1, M, N, S, Lua, Xga  
Column IAT: can not exclude E, c, Cw, f, V, k, Kpa, Jsa, Fyb, Jkb, Leb, P1, M, N, S, Lua, Xga  
These are tentative rule-outs.  
Additional confirmatory data based on your own criteria are recommended.

## Test Panel 18—Anti\_K\_IAT

Selected Panel Test Results

FileViewPatientHelp

Specimen #:

Panel Anti\_K\_IAT

Select/Add Patient...

☐ Review 1

☐ Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Vial	Rh-Hr						Kell					Duffy		Kidd	Lewis		P	MN			Luth		Sex	Additional Antigens	IAT					
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N			S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
1	Validation Anti_K_IAT	Donor106 #1	+	+	0	0	+	+	0	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0
2	Validation Anti_K_IAT	Donor107 #2	+	0	+	0	0	0	0	0	+	+	0	+	0	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0
3	Validation Anti_K_IAT	Donor108 #3	0	0	0	+	0	0	0	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0
4	Validation Anti_K_IAT	Donor109 #4	+	+	+	+	+	0	0	0	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	0
5	Validation Anti_K_IAT	Donor110 #5	+	0	+	+	0	+	+	0	+	0	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	0	0	0	0	0
6	Validation Anti_K_IAT	Donor111 #6	+	0	0	+	+	0	+	0	+	+	0	+	0	+	0	0	0	0	+	0	+	0	+	0	0	+	0	+	0	+
7	Validation Anti_K_IAT	Donor112 #7	0	0	0	+	0	+	0	+	+	0	0	+	+	0	+	0	0	0	W	0	+	0	+	0	+	0	+	0	+	0
8	Validation Anti_K_IAT	Donor113 #8	+	+	0	0	+	0	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	0
9	Validation Anti_K_IAT	Donor114 #9	+	+	0	0	+	+	0	0	+	0	+	0	+	+	+	+	+	0	+	0	+	0	+	0	+	+	+	+	+	0
10	Validation Anti_K_IAT	Donor115 #10	+	0	+	+	0	0	0	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	0	0	0	0
11	Validation Anti_K_IAT	Donor116 #11	0	0	0	+	+	0	0	0	+	+	0	+	0	+	0	+	0	+	0	+	+	+	+	+	0	+	0	+	0	+
	Auto Control																															

	Supplier / Lot #	Donor / RhHr-Vial	Rh-Hr						Kell					Duffy		Kidd	Lewis		P	MN			Luth		Sex						
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>	
	Homozygous Rule Outs	Double Dose	6	2	1	4	4	3	2	2	0	7	0	4	0	5	1	3	2	3	2	4	6	2	4	1	4	0	5	4	
	Heterozygous Rule Outs	Single Dose	0	0						0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				

Evaluation:

No exclusion yet

No exclusion possible

The following have insufficient negative reactions to exclude by your rules: K

Column IAT: can not exclude K

These are tentative rule-outs.

Additional confirmatory data based on your own criteria are recommended.







## Test Panel 23—Anti\_U\_Absent2

Selected Panel Test Results

File View Patient Help

Specimen #:

Panel Anti\_U\_Absent2

Select/Add Patient...

Review 1

Review 2

Click in Results Box to indicate test outcome.

Supplier / Lot #	Donor / RHH-Val	Rh-Hr										Kell					Duffy	Kidd	Lewis	P	MN			Luth	Sex	Additional Antigens	IAT			
		D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>	
1	Validation Anti_U_Absent2 Donor239 #1	0	0	0	+	+	0		0	0	+	0	+	0	+	0	0	+	+	0	+	+	+	+	0	0	0	+	+	0
2	Validation Anti_U_Absent2 Donor240 #2	+	0	0	+	+	0		0	0	+	0	+	0	+	0	0	+	+	0	+	+	+	+	0	0	0	+	+	0
3	Validation Anti_U_Absent2 Donor241 #3	+	+	0	0	+	+		0	0	+	0	+	0	+	+	0	0	+	+	+	+	+	0	+	+	0	+	+	0
	Auto Control																													

Homozygous Rule Outs Double Dose | 2 | 1 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 3 | 1 | 0 | 0 | 1 | 0 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 3 | 3 |  || Heterozygous Rule Outs | Single Dose | 0 | 0 |  |  |  |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 | 0 |  |  |  |

No exclusion yet

No exclusion possible

The following have insufficient negative reactions to exclude by your rules: E, f, V, K, Kp<sup>a</sup>, Jsa, Fyb, Jka, Lea, N, S, s, Lua

Column IAT: can not exclude E, f, V, K, Kp<sup>a</sup>, Jsa, Fyb, Jka, Lea, N, S, s, Lua

These are tentative rule-outs

Additional confirmatory data based on your own criteria are recommended.

Article II.

Article III.

Article IV.

Article V.

Article VI.

## Test Panel 24—Anti\_U\_Possible

Selected Panel Test Results

File View Patient Help

Specimen #:

Panel Anti\_U\_Possible

Select/Add Patient...

Review 1

Review 2

Click in Results Box to indicate test outcome.

Supplier / Lot #	Donor / RHH-Val	Rh-Hr										Kell					Duffy	Kidd	Lewis	P	MN			Luth	Sex	Additional Antigens	IAT			
		D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>	
1	Validation Anti_U_Possible Donor233 #1	0	0	0	+	+	0		0	0	+	0	+	0	+	0	0	+	+	0	+	+	+	+	0	0	0	+	+	0
2	Validation Anti_U_Possible Donor234 #2	+	0	0	+	+	0		0	0	+	0	+	0	+	0	0	+	+	0	+	+	+	+	0	0	0	+	+	0
3	Validation Anti_U_Possible Donor235 #3	+	+	0	0	+	+		0	0	+	0	+	0	+	+	0	0	+	+	+	+	+	0	+	+	0	+	+	2+
	Auto Control																													

Homozygous Rule Outs Double Dose | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |  || Heterozygous Rule Outs | Single Dose | 0 | 0 |  |  |  |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 | 0 |  |  |  |

No exclusion yet

No exclusion possible

The following have insufficient negative reactions to exclude by your rules: C, E, Cw, f, V, K, Kp<sup>a</sup>, Jsa, Fyb, Jka, Jkb, Lea, P1, M, N, S, s, Lua, Xga

Column IAT: can not exclude C, E, Cw, f, V, K, Kp<sup>a</sup>, Jsa, Fyb, Jka, Jkb, Lea, P1, M, N, S, s, Lua, Xga, w/Possible Anti-U.

These are tentative rule-outs

Additional confirmatory data based on your own criteria are recommended.

## Test Panel 25—Anti D\_K

Selected Panel Test Results

FileViewPatientHelp

Specimen #:

Panel Anti\_D\_K

Select/Add Patient...

Review 1

Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhHr-Val	Rh-Hr							Kell					Duffy		Kidd	Lewis	P	MN			Luth		Sex	Additional Antigens	IAT				
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N			S	s	Lu <sup>a</sup>	Lu <sup>b</sup>
1	Validation Anti_D_K #1	Donor246	+	+	0	0	+	0		0	0	+	0	+	0	+	0	+	0	+	+	+	0	+	0	+	+				2+
2	Validation Anti_D_K #2	Donor247	+	0	+	+	0	0		0	0	+	0	+	0	+	0	+	0	+	+	+	0	+	0	+	+				2+
3	Validation Anti_D_K #3	Donor248	0	0	0	+	+	0		0	+	+	0	+	0	+	0	+	0	+	0	+	+	+	0	+	+				0
4	Validation Anti_D_K #4	Donor249	+	+	0	0	+	0		0	+	0	0	+	0	+	0	+	0	+	+	+	+	+	0	+	+				1+
5	Validation Anti_D_K #5	Donor250	0	0	0	+	+	0		0	0	+	0	+	0	+	0	+	0	+	0	+	+	+	0	+	+				0
6	Validation Anti_D_K #6	Donor251	0	0	0	+	+	0		0	0	+	0	+	0	+	0	+	0	+	+	+	+	+	0	+	+				0
7	Validation Anti_D_K #7	Donor252	0	0	0	+	+	0		0	0	+	0	+	0	+	0	+	0	+	+	+	+	0	+	+	+				0
8	Validation Anti_D_K #8	Donor253	0	+	0	+	+	0		0	0	+	0	+	0	+	0	+	0	+	+	+	+	+	0	+	+				0
9	Validation Anti_D_K #9	Donor254	0	0	+	+	+	0		0	0	+	0	+	0	+	+	+	0	0	+	+	+	+	0	+	+				0
10	Validation Anti_D_K #10	Donor255	0	0	+	+	+	0		0	0	+	0	+	0	+	0	+	0	+	+	+	+	+	0	+	+				0
11	Validation Anti_D_K #11	Donor256	0	0	+	+	+	0		0	+	0	0	+	0	+	+	0	0	+	+	+	+	+	0	+	+				1+
	Auto Control																														

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / Rh+Val	Rh-Hr							Kell					Duffy		Kidd	Lewis	P	MN			Luth		Sex					
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
	Homozygous Rule Outs	Double Dose	0	0	0	6	5	0	0	0	0	6	0	7	0	7	2	4	2	5	1	5	5	2	1	2	2	0	7	7
	Heterozygous Rule Outs	Single Dose	1	2							0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0			

No exclusion yet

No exclusion possible

The following have insufficient negative reactions to exclude by your rules: D, Cw, f, V, K, Kpa, Jsa, Lua  
Column IAT: can not exclude D, Cw, f, V, K, Kpa, Jsa, Lua  
These are tentative rule-outs.  
Additional confirmatory data based on your own criteria are recommended.

## Test Panel 26 Heterozygous\_C



Selected Panel Test Results

File View Patient Help

Specimen #:

Panel Heterozygous\_C

Select/Add Patient...

☐ Review 1  
☐ Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhH-Mat	Rh-Hr								Kell				Duffy		Kidd	Lewis	P	MN			Luth		Sex	Additional Antigens	IAT					
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N			S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
1	Validation Heterozygous_C	Donor244 #1	0	+	0	+	+	0	0	0	+	0	+	0	+	+	0	+	+	+	+	+	+	+	+	+	0	0	+	+		0
2	Validation Heterozygous_C	Donor245 #2	+	0	+	+	0	0	0	0	+	+	+	0	+	0	+	+	+	+	0	+	+	0	0	+	+	+	+	+		1+
	Auto Control																															

		Rh-Hr										Kell				Duffy		Kidd	Lewis	P	MN			Luth	Se						
		D	C	E	c	e	C <sup>W</sup>	f	V		K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>	
Homozygous Rule Outs	Double Dose	0	0	0	0	1	0	0	0	0	1	0	1	0	1	0	0	0	0	1	0	1	1	0	0	1	0	0	1	1	
	Single Dose	1	0								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

☐ No exclusion yet    ☐ No exclusion possible  
 Evaluation:  
 The following have insufficient negative reactions to exclude by your rules: D, E, c, C<sup>W</sup>, f, V, K, Kp<sup>a</sup>, Jsa, Fya, Fyb, Jka, Lea, P1, M, N, s, Lua, Xga  
 Column IAT: can not exclude D, E, c, C<sup>W</sup>, f, V, K, Kp<sup>a</sup>, Jsa, Fya, Fyb, Jka, Lea, P1, M, N, s, Lua, Xga  
 These are tentative rule-outs.  
 Additional confirmatory data based on your own criteria are recommended.

## Test Panel 27 Heterozygous\_E

Selected Panel Test Results

File View Patient Help

Specimen #:

Panel Heterozygous\_E

Select/Add Patient...

☐ Review 1  
☐ Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RhH-Mat	Rh-Hr								Kell				Duffy		Kidd	Lewis	P	MN			Luth		Sex	Additional Antigens	IAT					
			D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N			S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
1	Validation Heterozygous_E	Donor242 #1	0	0	+	+	+	0	0	0	+	0	+	0	+	+	0	+	0	+	+	+	+	+	+	+	+	+	+	+		0
2	Validation Heterozygous_E	Donor243 #2	+	+	0	0	+	+	0	0	+	+	0	+	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	+		1+
	Auto Control																															

		Rh-Hr									Kell				Duffy		Kidd	Lewis	P	MN			Luth	Sex						
		D	C	E	c	e	C <sup>W</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Js <sup>a</sup>	Js <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>	
	Homozygous Rule Outs	0	0	0	1	0	0	0	0	0	1	0	1	0	1	1	0	1	0	0	0	1	1	0	0	0	1	0	0	1
	Heterozygous Rule Outs	0	1							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			

☐ No exclusion yet    ☐ No exclusion possible  
 Evaluation:  
 The following have insufficient negative reactions to exclude by your rules: D, C, e, C<sup>W</sup>, f, V, K, Kp<sup>a</sup>, Jsa, Fyb, Jkb, Lea, P1, M, N, S, Lub, Xga  
 Column IAT: can not exclude D, C, e, C<sup>W</sup>, f, V, K, Kp<sup>a</sup>, Jsa, Fyb, Jkb, Lea, P1, M, N, S, Lub, Xga  
 These are tentative rule-outs.  
 Additional confirmatory data based on your own criteria are recommended.

## Test Panel 28 K\_Kpa\_Jsa\_Anti\_S

FileViewPatientHelp

Specimen #:

Panel K\_Kpa\_Jsa\_Anti\_S: 2 rule outs required, 4 for P1 and Xga 

old exclusion criteria

Select/Add Patient...

Review 1

Review 2

Click in Results Box to indicate test outcome.

	Supplier / Lot #	Donor / RHH-Val	Rh-Hr							Kell							Duffy		Kidd	Lewis	P	MN			Luth	Sex	Additional Antigens	IAT				
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S			s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
1	Validation K_Kpa_Jsa_Anti_S	Donor263 #1	0	0	0	+	+	0		0	0	+	0	+	0	+	0	+	0	+	0	+	+	+	+	0	+	0	+	+		2+
2	Validation K_Kpa_Jsa_Anti_S	Donor264 #2	+	+	0	0	+	+		0	0	+	0	+	0	+	0	+	0	0	0	0	+	+	+	+	0	0	+	+		2+
3	Validation K_Kpa_Jsa_Anti_S	Donor265 #3	+	+	0	0	+	0		0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	+		0
4	Validation K_Kpa_Jsa_Anti_S	Donor266 #4	+	0	+	+	0	0		0	0	+	0	+	0	+	0	+	0	+	0	+	+	0	+	0	+	0	+	0		0
5	Validation K_Kpa_Jsa_Anti_S	Donor267 #5	+	W	+	+	0	0		0	0	+	0	+	0	+	0	+	0	+	0	+	+	0	+	+	0	+	+	+		0
6	Validation K_Kpa_Jsa_Anti_S	Donor268 #6	+	0	0	+	+	0	+		0	+	0	+	+	0	0	+	0	0	0	+	+	+	+	0	+	0	+		0	
7	Validation K_Kpa_Jsa_Anti_S	Donor269 #7	+	+	0	0	+	+		0	0	+	0	+	0	+	+	+	0	0	0	+	+	+	0	+	0	+	0		0	
8	Validation K_Kpa_Jsa_Anti_S	Donor270 #8	0	0	0	+	+	0	+		0	0	0	+		+	+	+	+	+	0	+	+	+	0	+	0	0	+		2+	
9	Validation K_Kpa_Jsa_Anti_S	Donor271 #9	+	+	0	0	+	0		0	0	+	0	+	0	+	0	+	0	0	0	+	0	+	0	+	0	+	0		0	
10	Validation K_Kpa_Jsa_Anti_S	Donor272 #10	+	+	0	0	+	+		0	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0		0	
11	Validation K_Kpa_Jsa_Anti_S	Donor273 #11	+	+	0	0	+	0	0		0	+	0	+	0	+	+	+	+	+	+	0	+	+	0	+	0	+	+		0	
12	Validation K_Kpa_Jsa_Anti_S	Donor274 #12	0	0	0	+	+	0	+		0	+	+		+	+	0	+	+	0	+	+	+	+	+	0	+	+	+		0	
	Auto Control																															

			Rh-Hr							Kell							Duffy		Kidd	Lewis	P	MN			Luth	Sex				
			D	C	E	c	e	C <sup>w</sup>	f	V	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Fy <sup>a</sup>	Fy <sup>b</sup>	Jk <sup>a</sup>	Jk <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P1	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>
	Homozygous Rule Outs	Double Dose	8	5	2	3	7	2	2	1	0	7	0	8	0	7	4	2	4	3	2	6	6	2	3	1	8	1	6	6
	Heterozygous Rule Outs	Single Dose	0	0						2		1		1		0	0	0	0	0			0		0		0		2	

Evaluation: ☐ No exclusion yet ☐ No exclusion possible

The following have insufficient negative reactions to exclude by your rules: V, Kpa, Jsa, S  
Column IAT: can not exclude V, Kpa, Jsa, S  
These are tentative rule-outs.

