CHEM.CENTAUR.4.0 ADVIA Centaur XPT Operating Procedure

PURPOSE

ADVIA Centaur XP system is an automated immunoassay analyzer that uses direct chemiluminescent technology. When the sample start key is pressed, the barcode labels on the sample cups are read, sample is aspirated, reagent is dispensed, and the assay process begins. Particles are magnetically separated in the cuvette incubation ring. The addition of hydroxyl groups to complete the flash reaction is accomplished by the addition of Reagent 1 & 2; Acid and Base. The chemiluminescent reaction occurs in the luminometer. The PMT measures the chemical light reaction that takes place.

DOCUMENT OWNER

Manager, Chemistry and Special Chemistry

RELATED DOCUMENTS

CHEM.CENTAUR.3.0 Maintenance on the ADVIA Centaur XPT

SPECIMEN

Refer to individual ADVIA Centaur assay procedures.

REAGENTS

Refer to individual ADVIA Centaur assay procedures.

CALIBRATION

Refer to individual ADVIA Centaur assay procedures.

QUALITY CONTROL

Refer to QC procedure CHEM.QC.REGCHEM.2.0 for specific details.

PROCEDURE

A. System Key:

There is one (1) main system operation key on the ADVIA CENTAUR, the “Sample Start button.” Pressing this key performs the following actions:

1. Homes the subsystems.
2. The system starts specimen sampling.
3. If the start button is pressed while the instrument is running, it stops sampling additional specimens; however, it continues to process the specimens in the incubation ring.

B. Start-up

1. Schedule the worklist.

a. LIS generated: With the LIS there is no scheduling, just load and go.
b. Operator generated

2. Put the samples on the sample entry queue.
3. Press the sample start button.

C. Verify Supplies:

During the run the following supplies can be replenished without interrupting the run.

1. Replenish the Reagent water supply.
2. Remove and empty the liquid waste container.
3. Verify the levels of Reagents 1 & 2 and replace as needed.
4. Empty the cuvette waste bin.
5. Empty the sample tip waste bin and tip tray waste area.
6. Replenish the cuvette supply.
7. Replenish the sample tip supply.
8. Replenish ancillary packs as needed.
9. Replenish primary reagent packs as needed. Click on Status.
10. Select packs to remove, Click remove.
11. Load reagent pack to the LEFT of the on board reagent.
12. Schedule calibrations as needed.

D. Scheduling Run / Entering Worklist

You can enter a worklist by different methods:

1. Automated Worklist

   The worklist can be sent to the ADVIA CENTAUR from a Lab Information System (LIS). This can be done in a unidirectional manner (Dynamic Download) or in a bi-directional manner (Host Query).

2. Manual (Operator initiated) Worklist
   a. Scheduling Calibrators
      1) At the command bar, select CALIBRATION and then CALIBRATION ORDER.
      2) Select each test you want to schedule for a specific calibrator.
      3) The reagent lot that is on the system and any defined calibrators are displayed. Select the appropriate lot combination.
      4) Select SAVE.
      5) Ensure that the lot numbers of reagent and calibrator are available for system use.
   b. Scheduling Controls
      1) At the command bar, select ORDERS and then select QC ORDER tab.
      2) Select the CONTROL box.
      3) Select individual testes to schedule or select profile tab.
      4) Select each control level and lot number you wish to run.
      5) Select SAVE.

c. Scheduling Patient Samples

1) At the command bar, select ORDERS, then select ORDERS
2) Enter a patient sample identification number (SID), then select specimen type i.e.; serum, plasma.
3) Select individual testes or profile to run.
4) Select SAVE.

For additional operating instructions consult the CENTAUR Reference Manual, or Centaur XPT system pep to Go Guide, or use the online "HELP" windows.

E. Loading Sample Racks

1. Gently mix the calibrators and quality controls before dispensing into the sample cups.
2. Load the sample cups containing calibrators, controls, or patient specimens into any CENTAUR rack.
3. Press the sample start button.

F. Loading Ancillary Reagents

Place the ancillary reagent pack on the ancillary entry queue until the queue light comes on. The ADVIA CENTAUR will take the pack into the ancillary queue.

G. Loading Primary Reagents

1. Gently mix the reagent pack before placing it on the reagent shelf for the first time. Refer to the reference manual for more detailed instructions on reagent mixing.
2. Load the primary reagents according to color on the color coded reagent shelf.
3. Close the reagent compartment door.

For additional instructions consult the CENTAUR Reference manual or the online help windows.

CALCULATIONS

N/A

REPORTING RESULTS

Refer to individual ADVIA Centaur assay procedures.

PROCEDURE NOTES

Refer to individual ADVIA Centaur assay procedures.

LIMITATIONS

Refer to individual ADVIA Centaur assay procedures.

REFERENCES

A. ADVIA Centaur Immunoassay System PEP to GO, Rev. 6/162015
B. Onboard Operating Guidelines