

### **CT/GC Combination Test**

#### **Procedure for Transferring Urines to the Gen-Probe Urine Specimen Transport Tube**

DNA and RNA tests are extremely sensitive and the quality of the specimens sent for testing has a direct effect on the quality of the results. If you are collecting or handling specimens that will be sent for laboratory testing, you are responsible for beginning testing. The care you put into handling and labeling the specimen collected from your patient directly affects the quality of the result you get back. Although this is true of all specimens, molecular testing specimens are particularly sensitive to any pre-analytic activities. DNA and RNA is everywhere in the environment. This means that it is very easy to contaminate molecular specimens, particularly if you don't use good technique. The more meticulous you are about making sure your work area has been cleaned frequently and handling each specimen separately with fresh gloves and a new pipette for each, the less chance you will have of a contamination event.

#### **Things to Do Before You Start:**

1. If possible choose a work area that is out of the flow of traffic and that isn't in the path of air currents from fans or open windows.

2. Clean your work area for transferring specimens with a bleach solution to make sure that it is clean and free of "stray" DNA and RNA. ALWAYS wear gloves when working with bleach. If you will be pouring it, you should also wear eye protection to prevent it from splashing in your eyes.
  - a. Make up a 1:1 solution of household bleach in a squirt bottle by mixing equal parts of water and household bleach. Be careful not to get this solution in your eyes or on your skin as it can cause eye and skin damage as well as discolor your clothes.
  - b. Apply the bleach solution using a squirt bottle to the area where specimens are to be transferred.
  - c. Let bleach solution sit for one minute.
  - d. Wipe up excess bleach water with paper towels.
  - e. Wipe down bench area with plain water and allow to dry (you can speed drying by wiping down the area with alcohol after the water).

#### **Collecting the Patient Specimen:**

1. Complete a test request form by filling in the patient's identifying information and all other required fields.
2. Write a patient identifier (e.g. name, chart number, or date of birth) for the patient on one of the labels at the bottom of the request form. This label will be used on the Gen-Probe urine

transport tube and will help tie the specimen to the correct request form at the lab.

3. Write a patient identifier (e.g. name, chart number, or date of birth) on a urine specimen collection container and give it to the patient to collect the urine.
4. Make sure you have any other helpful supplies. You will need gloves, some kind of absorbent wipes or paper towels, your 1:1 bottle of bleach, and a garbage container and/or biohazard container depending on your facility's waste disposal policy.

**Transferring the Specimen:**

1. To preserve the best specimen for testing, the fresh urine should be transferred as soon after collection as possible. Do not let any specimen sit more than one hour before transferring it.
2. Work with one specimen at a time to prevent contamination. Never have more than one specimen open at a time.
3. Put on a new, clean pair of gloves for each specimen – this not only protects you from contact with the patient's body fluids but it protects the specimen from being contaminated by any "stray" DNA or RNA from your skin or a previous specimen.
4. Place the container containing the patient's urine on the counter and

loosen the lid – do not remove it yet.

5. Open the Gen-Probe Urine Specimen Collection Kit and lay the contents on the paper half of the packaging. The kit should contain a screw-cap tube with a yellow label and a pipette. Throw the plastic part of the outer package away.
6. Hold the tube upright and unscrew the cap.
7. It is best if you can hold the cap with your pinkie finger while you do the transfer, but if you don't feel comfortable doing this then you may set the cap, FOIL SIDE DOWN on the clean benchtop. Be careful not to touch the interior of the cap as this may contaminate the specimen.
8. Using one hand, pick up the pipette that you laid on the packaging earlier.
9. With the other hand, tip the lid on the urine container so that you have access to the liquid inside.
10. Squeeze the bulb of the pipette to displace the air inside.
11. WITHOUT TOUCHING the tip of the pipette to anything, place the tip of the pipette in the liquid and relax the pressure on the bulb to draw the urine into the pipette.
12. If the urine has been sitting for 30 minutes or more, you will need to mix it in order to get a good sample for testing. To do this, place the tip near

the bottom of the container and squeeze and relax the pipette bulb 8-10 times with moderate intensity. You want to mix the specimen, not spatter it or create foam.

13. WITHOUT TOUCHING the tip to anything, withdraw the pipette from the container and place the lid back on it.
14. Place the tip of the pipette inside the Gen-Probe urine collection device and squeeze the bulb gently to dispense the urine into the collection device. Discard the pipette into the waste container.
15. The level of the urine in the collection device must be between the two black lines of the "Fill Area" window. If the level is not between the two lines, the specimen will be unsatisfactory for testing. If this happens, you can get a new collection device and begin again at step 3 using the leftover specimen.
16. Replace the cap of the collection device and make sure that the tube does not leak.
17. If any specimen has gotten on the outside of the container, use a bleach-soaked absorbent wipe to wipe down the outside of the tube.
18. Match the identification on the request form with the identification on the patient specimen container to make sure that you have the correct paperwork and specimen together.
19. Place the label from the bottom of the request form with the patient identifier written on it on the urine collection device. Orient the label so that if you were holding the tube horizontal to the counter with the top in your right hand, you would read the label left to right. Do not cover up the clear window on the tube labeled "Fill Area" and do not slant the label. These three things are important for the instrument to process the specimen correctly.
20. Wipe up any spills with the bleach solution and dispose of the remaining urine in the initial collection device according to your facility's protocols.
21. Place the labeled and filled Gen-Probe urine collection device in a specimen bag and close it.
22. Remove your gloves and wash your hands.
23. Place the paperwork with the requisition number showing in the outer pocket of the specimen bag.
24. Place the packaged specimen in the appropriate place to be transported to the lab. The processed urine specimens in the GEN-PROBE APTIMA urine specimen transport tube can be transported at 2°C to 30°C and stored at 2°C to 30°C until tested. Processed urine specimens should be assayed with the APTIMA Combo 2 Assay within 30 days of collection.



After You Have Transferred All Specimens for the Day:

After you have finished transferring specimens for the day, you will need to clean your work area with the bleach solution again just as you did before you started. This will remove any DNA or RNA that has collected on the work area and help prevent accidental contamination.