

Instructions – Urine Culture Proficiency Testing Samples

A single sample consists of a lyophilized sample representing a pure or a mixed microorganism population AND a wide-mouth container with sterile dilution fluid.

Caution: These proficiency testing samples are devices that contain a lyophilized and viable population of microorganisms. It is intended that “technically qualified individuals” working in microbiology laboratories (those individuals who, because of professional or technical education, training or experience, understand the hazards prior to exposure) are aware of the potential hazards and deal with the hazards as integral part of their standard operational procedures. Discard all material(s) in accordance with the laboratory protocol for the disposal of biohazardous materials. Laboratory protocol for the disposal of biohazardous material must comply with community, county, state, or federal regulations.

**Upon receipt, and prior to use, store the lyophilized samples
in the sealed vials, under refrigeration (4⁰C to 8⁰C)
Store the dilution fluid containers at room temperature.**

GENERAL INSTRUCTIONS

A. Selection of Primary Agar Media or Commercial Detection and Enumeration Device.

1. According to your laboratory procedure for the type of clinical sample this proficiency sample represents, select the primary agar media or commercial device.
2. Prior to inoculation with the proficiency testing sample, allow the agar media or commercial device to warm to room temperature.

B. Hydrating the Lyophilized Sample

1. Remove the lyophilized sample vials from 4⁰C to 8⁰C storage and allow the unopened vials to equilibrate to room temperature.
2. Prewarm dilution fluid containers at 37⁰C for thirty (30) minutes.
3. ONLY the dilution vials that are provided with the proficiency testing samples can be used.
4. Open the lyophilized sample vial, remove and discard the desiccant pillow. Empty the entire contents of each lyophilized preparation vial into an individual prewarmed dilution vial container. All the lyophilized material(s) in each vial contribute to the microorganism population. DO NOT discard any lyophilized material.
5. Reseal the dilution container and mix the container thoroughly.
6. Incubate the lyophilized preparation/dilution container at 37⁰C for thirty (30) minutes to facilitate complete hydration of the lyophilized sample.

C. Proficiency Testing Urine Sample

The entire contents of each lyophilized preparation/dilution container simulate a urine sample. The volume of the dilution fluid and the container is designed to simulate a urine sample and accommodate different semi-quantitative urine culture methods.

1. IMMEDIATELY, following the hydration/incubation step, mix the lyophilized preparation/dilution container until the pellet particles are uniform in size and the solution is homogeneous in appearance.
2. Following laboratory procedures or the manufacturer’s directions: a) Inoculate the culture media surfaces with a calibrated loop; b) by immersing the “dip-slide” media into the dilution vial; or c) by transferring a portion of the dilution fluid into an agar-coated device and pouring off the excess fluid.
3. Discard the remaining hydrated/dilution fluid material in accordance with the laboratory protocol for disposal of biohazardous materials.

D. Incubation of Inoculated Media: According to your laboratory procedure or the manufacturer’s directions, incubate the inoculated media for the appropriate period of time, at the appropriate temperature and under appropriate environmental conditions.

E. Laboratory Tests: According to your laboratory procedure or the manufacturer’s directions, and the PT Sample subscription requirements, identify the isolates(s) perform antibiotic susceptibility tests, and/or interpret the colony count.