

Standard Operating Procedure

Microbiological Monitoring (ATP Luminometer)

The purpose of this Standard Operating Procedure is to describe a program that will adequately measure the efficacy of disinfection of animal quarters and equipment in each laboratory animal facility.

Proper sanitation and disinfection are important to any program of animal care. The Animal Welfare Act and the Guide for the Care and Use of Laboratory Animals include provisions for appropriate sanitation and disinfection of animal quarters and equipment. In this regard it is essential that the efficacy of disinfection procedures be monitored to assure adequate inactivation of potentially pathogenic microbes. The Guide lists microbiologic monitoring as a direct way of measuring the efficacy of the disinfection of laboratory equipment.

Mechanical washing equipment such as rack washers should be tested once a week sampling 2-3 pieces of equipment to ensure they are sanitizing properly. This is in addition to the temp tapes being used daily.

Areas where hand washing is needed or performed, after cleaning is completed and the area dry, the item or area (pen, wall, floor) should be tested as well.

A tracking sheet with testing results should be maintained in the facility for review.

Date	Time taken from Refrigerator	Time Used	Washing Equipment Assessed*	Equip. Tested 1	Result	Equip. Tested 2	Result	Equip. Tested 3	Result	Techn. Initials
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ATP Luminometers can be purchased from a variety of sources including Fischer Scientific, Sanitation Strategies and Quip. The Animal Husbandry and Facilities Operations Manager can be contacted for assistance in purchasing. ATP Swabs must also be purchased for use with the Luminometer. These must be refrigerated on arrival.

Procedures for Microbiological Monitoring with the ATP Luminometer

1. Remove ATP swab from refrigerator and allow it to come to room temperature – 10-20 minutes.
2. Ensure the area or equipment you are sampling is dry
3. Remove the swab from the test tub and swab surface – swabbing motion should be a 4 X 4 inch square while rotating swab or a random motion that ensures good coverage of the sample area.
4. Place swab back in test tube.

5. Break the plastic Snap Valve at the top of the swab by bending the bulb. Squeeze the bulb twice, pushing the liquid reagent down the swab shaft.
6. Shake for 5 seconds.
7. Place the test tube in the Luminometer and close the lid. Make sure the lid closes completely and the unit should self-calibrate at that time.
8. Ensure you hold the Luminometer in the upright position.
9. Press "OK" and the reading will appear in 15 seconds.
10. Results will be reported as follows:
 - 0-10 : Acceptable
 - 11: or higher: Unacceptable

Note: Samples should be read immediately. The luminescent reagent will break down over time and give false negatives if samples sit and are not read within one minute after the bulb is broken.