

## Environmental Monitoring: Surface Testing

Monitoring your facility's environment can help to gauge the effectiveness of your cleaning and biosecurity practices. Charles River recommends a quarterly surface check of drains, walls, floors, work stations, laminar flow hoods, light switches, door handles and washed cages. RODAC™ plates and/or swabs can be used to monitor these areas of critical use.

This information includes some basic recommendations, but each facility is different. Upon request, we will review a facility floor plan and make sample site recommendations. While we provide swabs, due to the labile nature of RODAC™ plates, we recommend acquiring RODAC™ plates directly from a supplier.

We provide:

- Submission forms
- Amies transport swabs w/o charcoal
- Dry Remel™ swabs for PCR samples (do not use alginate swabs)
- Cold packs for PCR swabs (please freeze)
- Shipping container to return samples

**NOTE: Samples must be received by the testing facility in Wilmington, MA within 24-48 hours from the time of collection. It is advisable to use next morning shipment.**

### Microbiology Plate Sample Collection

RODAC™ or other contact plates are gently pressed directly against the flat surface to be sampled. Depending on the organisms of concern either selective or non-selective plates can be utilized.

### Microbiology Swab Sample Collection

Surface swabs can be used on flat or irregular surfaces, such as corners or walls or animal cages, and can be applied with significantly more force than contact plates. This allows for greater microbial recovery. When swabbing, target areas that are less likely to be cleaned efficiently. The amount of area to be swabbed varies, depending on the amount of dirt present. Pay particular

attention to shared equipment in animal procedure rooms, as well as corners, door knobs, sink drains, keyboards, light switches, etc.

Label all containers with the sample identification, date and time of collection.

Aseptically, open the transport tube. With sterilized gloved hands, remove the swab from the tube. Make sure the swab is moistened with the transport media; replace the tube top while collecting the sample to preserve the sterility of the tube.

Swab smooth areas up to one square meter; wipe five times in a bottom to top direction and five times in a left to right direction. Put the swab back into the transport tube with the cotton in the media.

Twirl the swab against the side of the transport tube to expel some of the sample into the media. Replace the cap on the transport tube. Return the swab samples at room temperature in the shipping container provided.

### RODAC™ Plate Sample Collection

Label all containers with the sample identification, date and time of collection. One plate can be used for several walls within a flow hood or for each wall in an animal room.

Aseptically, with sterilized gloved hands, gently press the plate onto the surface to be sampled, following all manufacturers instructions.

RODAC™ plates should be sealed with tape or parafilm and shipped at room temperature in the shipping container provided.

### PCR Swab Sample Collection for Viruses and Fastidious Bacteria

We only include, and only recommend, approved Dacron swabs with covers for collecting samples for polymerase chain reaction (PCR) testing. Unlike alginate swabs, this material has not been associated with PCR inhibition.

# technical sheet

Sterile swabs may be used dry or dipped in sterile water or phosphate buffered saline. It is important not to touch the head or shaft of the swab.

Do not place PCR swabs in transport media. Return the swab samples on frozen cold packs in the shipping container provided.

## Air Filter Sample Collection for PCR

Collect a two inch by two inch area of the dirtiest section of filter from room exhaust and duct filters. The material should have a minimum of two weeks use, but any time beyond this period will increase the ability to detect agents. If the filter material itself cannot be provided, submit sterile gauze placed over the filter for the same time period recommended for the filter material.

Send samples and submission forms, in the shipping crates provided, to:

Charles River  
Attn: Microbiology Laboratory  
251 Ballardvale Street  
Wilmington, MA 01887

Please contact us at 1.877.CRIVER1 (1.877.274.8371) or [askcharlesriver@crl.com](mailto:askcharlesriver@crl.com) with any questions regarding sample submission.