What is Rapid Mycoplasma Testing?

Research Cell Bank (RCB) uses the MycoProbe kit from R&D solutions to run the test. It captures and detects the 16S ribosomal RNA of the most common strains of mycoplasma. The entire process takes approximately six hours, depending on the amount of samples, and is only run once a week.

When are the tests performed?

The test is run every Tuesday.

What if Tuesday is a holiday/inclement weather/etc?

Research Cell Bank staff are considered essential personnel and should be present during inclement weather. However, depending on staffing ability, we may not be able to perform all services. If there is services interruption on Monday and/or Tuesday of a given week, then the test will be run Wednesday or reschedule information will be posted.

RCB is closed on all Fred Hutch holidays. If a holiday lands on a Monday or Tuesday, the test will be rescheduled as listed above.

What are your submission requirements?

RCB strongly encourages submission of cell culture supernatant. Please provide 100-200 uL; the culture that has not yet been fed on the day you collect the sample. If you are testing adherent cells, please provide supernatant.

If you would prefer to submit a cell pellet, please provide an aliquot with 1.25x10^6 cells. Samples that are cell pellets much be clearly marked.

Samples can be submitted in the 1100 Eastlake building in E1-305. Hours for submission are Monday through Friday, 7am to 6pm.
How should the samples be labeled?

Please make a simple indication of sample identification on the top of the tube. For example, if Jane Smith was submitting four samples, they would be labeled JS1, JS2, etc. If you are unable to mark the top of your tubes, include a list of your samples on your order form so that we can identify them.

How many samples can I submit?

The minimum number is one. For orders over fifty samples, please contact us ahead of time so that we can make arrangements.

Where can I find the order form/how much does testing cost?

Please contact us at rcb@fredhutch.org for further information.

Can you expedite testing?

Expediting might be available for an additional depending on lab staffing and schedule. Please contact us at rcb@fredhutch.org for further information.

What mycoplasma species does the test detect?

M. hyorhinis       M. pirum
M. arginini       M. hominis
M. fermentans     M. salivarium
M. orale          M. laidlawii

Can you test pathogenic, viral, or infectious samples?

Yes. Please let us know what the pathogen is and provide to us a heat inactivated sample. Please do not use UV inactivation, as it may interfere with the probe binding stage of the test.
Can mouse/dog/nonhuman samples be tested?

Yes.

What does it mean if my test is inconclusive?

The sample is suspect for mycoplasma. Our recommendation is to continue culturing for a few days and resubmit for testing. A second inconclusive result indicates that no mycoplasma is detected.

What do I do if my sample is positive for mycoplasma?

If you have a positive result for mycoplasma, we recommend isolating the sample in question and treating it with an antibiotic, such as plasmocin or primocin. Treat for two weeks, and if cells appear to be proliferating well, retest.