# University of Colorado Denver | Anschutz Medical Campus

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| **Subject:** | **Testing of Cell Lines and Biological Materials of Rodent Origin or Have Been Passed Through Rodents** |
| Source: | IACUC & Office of Laboratory Animal Resources |
| Effective Date: | 01/08/2024 |
| Replaces: | 12/14/2020 |
| Applies to: | Personnel involved in research or teaching studies involving animals |
| Reference: | Animal Welfare Act; PHS Policy on Humane Care & Use of Laboratory Animals; Guide for the Care & Use of Laboratory Animals |

## Introduction

Aside from introducing live animals into a colony and indirect contact between animal populations through unrestricted personnel traffic, the inoculation of rodents with biological material bears the greatest risk for introduction of unwanted microorganisms. If cell lines, biologics such as serum, transplantable tumors or hybridoma lines originate from infected rodents or are cultured in media containing rodent serum, they may harbor a pathogen and when inoculated may transmit it to the inoculated animal. When biological material is stored in freezers, contaminating microorganisms may remain infectious over long periods of time. Because the Office of Laboratory Animal Resources (OLAR) at the University of Colorado Denver | Anschutz Medical Campus (CU Denver | Anschutz) has been mandated to maintain a Specific Pathogen Free (SPF) program due to the devastating impact of adventitious infections on research program we require that all cell lines and other biological material of rodent origin or that have been passaged through rodents be tested prior to introduction into any clean animal facility.

## Policy Statement

All cell lines or other biological material of rodent origin and all non-rodent biological materials that have or may have been passaged through rodents must be tested by an OLAR-approved method prior to being placed into live rodents in any OLAR operated facility.

## Procedures

- Research staff that would like to bring untested cell lines or other biological materials of rodent origin and all non-rodent biological materials that have or may have been passaged through rodents into any clean animal facility operated by OLAR, must contact the Veterinarian overseeing the biosecurity program or designee.
- The Veterinarian will provide them with information on locations where testing may be performed and discuss the procedure for how the testing will be accomplished (whether the animals will be quarantined until the results are obtained, as in the case with serial passaged tumor lines, or if testing of the cell lines or biologicals will be required prior to introduction into the facility).
- Approved methods include mouse/rat/hamster antibody production test (MAP, RAP, HAP test) or PCR-based testing (eg. IMPACT I test or equivalent).
- Once testing is completed, results must be forwarded to the OLAR Veterinarian overseeing the biosecurity program, or designee, for review prior to the animals, cell lines or biological materials being allowed to enter the general population.
- Once the cell line or biological material has been tested, if it remains in a clean, SPF facility operated by OLAR, no further testing will be necessary.
- The cost of testing, as is the case for any quarantine procedure, will be borne by the Principal Investigator.
- It is highly recommended that all cell lines undergo cell line authentication and testing for Mycoplasma to assure scientific validity.

Per regulatory requirements, failure to comply with this policy may result in notification of your funding agency (e.g. NIH) and regulatory agencies (e.g. USDA) that your research has violated federal and/or local policies regarding the humane use of animals. This notification may affect continuous funding of your animal-related research. Further, depending on the violation, you may be required to take additional training and/or your privilege to conduct animal research at CU Denver | Anschutz might be temporarily suspended or even completely revoked.