Queen's UNIVERSITY RESEARCH

UNIVERSITY ANIMAL CARE COMMITTEE

Policy on the Testing of Research Biologics for Pathogens

All research biologics that are to be introduced into any rodent at Queen's University (i.e.: cells, tissues, stem cells, proteins, serum components of cell culture media or other material that is derived from a living system) must be tested for murine pathogens. Research biologics are commonly passaged through rodents to maintain them. As a result, there are a number of instances where these materials have been the source of pathogen outbreaks. Research biologics must not be introduced into animals without prior approval from the University Animal Care Committee.

I. Background

- Research biologics can harbour murine pathogens capable of introducing disease into rodent colonies.
    - Although the prevalence has decreased in recent years, 25% of 297 mouse, rat, hamster, and human transplantable tumors and 69% of 465 murine leukemia's and tumors have historically been found to be contaminated with mouse or rat pathogens in the past (Lab Anim. Sci. 1993. 43:296).

- Rodent colonies at Queen's University are screened for infectious diseases and are maintained free of viruses and other microbial agents capable of interfering with research. The health of the colonies and the integrity of research can be endangered by inadvertent introduction of untested biological material carrying pathogens.

II. Guidelines

- For animals to be housed within the conventional mouse facility, biological materials of unknown status are to be tested for murine pathogens prior to inoculation into rodents at Queen's unless credible documentation is available that they are freshly prepared and have never been passed through or exposed to rodents.

***Note: Cell lines obtained from ATCC are NOT tested for murine pathogens.**

- All new protocol submissions requesting the introduction of research biologics into rodents will be required to submit evidence of testing (copy of serology report) with the protocol. Protocols in which this has not been completed may not be approved by the University Animal Care Committee.

- If research biologics are contaminated or the PI elects not to test the biological material, rodents will have to be housed within the Level 2 biohazard facility.

- All research groups currently using any form of Research Biologics in rodents will be required to submit evidence of testing (copy of serology report) as part of the annual protocol renewal

process. Protocols in which this has not been completed may not be renewed by the University Animal Care Committee.

II. Testing

- Samples can be submitted to either of the 2 following labs:

  1) Charles River Laboratory or
  2) Idexx BioAnalytics.

- Please contact the University Veterinarian/ Director of Animal Care Dr. Andrew Winterborn (x. 33047) to facilitate the testing of research biologics for pathogens.

References:

1. Niklas, W., V. Kraft, and B. Meyer. 1993. Lab Anim. Sci 43:296-300.

Revision History:

Date	New Version
09/23/2010	Policy Created & Approved
11/19/2014	Triennial Review
11/16/2017	Triennial Review
11/25/2020	Triennial Review; Revised to clarify that research biologics must not be introduced into animal without prior UACC approval; If research biologics contaminated or PI elects not to test, rodents will be housed in Level 2 biohazard; Addition of links to acceptable testing sources (Charles River Laboratory and Idexx BioAnalytics)
11/16/2023	Triennial Review; Revised Charles River hyperlink; New Format
10/22/2026	Triennial Review