Recommendations for Testing of Biological Specimens Intended for Use in Live Laboratory Rodents

UIUC Policy on Testing of Biological Specimens to be Implanted into Live Laboratory Animals requires that cells and tissues intended for injection or implantation into live laboratory rodents be tested for rodent pathogens.

Specific scenarios which may or may not require testing:

1. Cells which have never been tested, either commercially obtained, or from another investigator. YES

2. Cells which were tested and used previously, but frozen and stored, to be thawed for use again. MAYBE: testing documentation must be reviewed.

3. Cells obtained commercially or from another investigator, which have been tested before. MAYBE: testing documentation must be reviewed.

4. Cells which have been used at UIUC before, but were never tested: MAYBE: If sentinel documentation is available, and no outbreaks occurred, NO. If sentinels were not used to survey injected animals, YES.

5. Cells have been tested or used safely before, but have been passaged through rodents or rodent cells or serum since the testing or previous use: YES

If you are unsure about the requirements for any specific situation, please contact DAR.

Specimens to be implanted into mice should be tested for the following agents of concern:

Mouse Hepatitis Virus (MHV)

Sendai Virus

Pneumonia Virus of Mice (PVM)

Parvoviruses
  Mouse parvovirus (MPV)
Mouse Minute Virus (MMV)
Mycoplasma pulmonis
Theiler’s Meningoencephalitis Virus (TMEV, GDVII)
Reovirus 3
Lymphocytic Choriomeningitis (LCM)
Ectromelia, Mouse Pox Virus
Rotavirus (EDIM)
Mouse Adenovirus 1 (MAD1)
Mouse Adenovirus 2 (MAD2)
Polyomavirus (Poly)

Specimens to be implanted into rats should be tested for the following agents of concern:
Rat Coronavirus (RCV)
Sendai Virus
Pneumonia Virus of Mice (PVM)
Parvoviruses
    Kilham Rat Virus (KRV)
    Toolan’s H1(TH1)
    Rat Parvovirus (RPV)
Mycoplasma pulmonis
Theiler’s Meningoencephalitis Virus (TMEV, GDVII)
Reovirus 3
Lymphocytic Choriomeningitis (LCM)
Mouse Adenovirus 1 (MAD1)

Hantaan virus (Seoul)

DAR recommends polymerase chain reaction (PCR) testing of specimens. This service is available at different laboratories, including the University of Missouri’s Research Animal Diagnostic & Investigative Laboratory (RADIL), which refers to it as Infectious Microbe PCR Amplification Test (IMPACT). Information about testing, prices, and shipment of specimens may be located at the website: http://www.radil.missouri.edu/info/index.asp.

Other testing options are Mouse Antibody Production (MAP) or Rat Antibody Production (RAP) Testing. These services are available at different laboratories, including Harlan Sera-Lab (http://www.harlanseralab.co.uk/enter.htm) and Charles River Laboratories (http://www.criver.com/SRM/diagnostics/index.html). In general these tests are more expensive, take longer, and are less preferred due to animal welfare concerns. The profiles of agents tested should be verified with DAR as appropriate before testing is performed.

If there are questions concerning this required testing, please contact DAR at 333-2564.

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