

STANDARD OPERATING PROCEDURE SOP #610
TESTING OF BIOLOGICAL MATERIAL

2. REcontamination by adventitious pathogens if the material originated from ~~or~~ passed through an infected animal.

4.5.2 If the entire research protocol using material of untested or unknown animal origin will be conducted in a Biocontainment Level 2 (BCL2) facility, and the animals will not be moved to another McGill facility at any point, testing of rodent biologicals prior to use is not required.

4.6. Biological material of human origin (refer to [Annex 1](#)):

4.6.1. Material should be tested for human pathogens as detailed in section 4.7.2 and the corresponding rodent profiles detailed in section 4.7.3.

~~4.6.2.~~ If the entire research protocol using material of untested or unknown human origin will be conducted in a Biocontainment Level 2 (BCL2) facility, and the animals will not be moved to another McGill facility at any point, testing of materials prior to use is not required.

4.6.3. If credible documentation is available that the material has never been passaged through or established in rodents, or exposed to rodent products, e.g., rodent-derived feeder cells, serum, testing of materials for rodent pathogens prior to use is not required. Exemption from testing is evaluated on a case-by-case basis by the veterinarian.

4.6.4. Patient-derived xenografts (PDX):

4.6.4.1. It is recommended for the donor (patient) should be tested for the human pathogens as detailed in section 4.7.2. when possible. When testing is not feasible, contact Environmental Health and Safety for recommendations.

4.6.4.2. If the PDX will not be passaged through rodents, testing for rodent pathogens is not required.

4.7. Panel selection:

4.7.1. Select the testing panel as per the veterinarian's recommendation. The veterinarian may require additional tests based on health status of the host facility.

4.7.2. Human profile:

4.7.2.1. For testing of human primary cells, i.e., cells isolated directly from human tissues, including blood and bone marrow.

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| VIRUSES |
| Human immunodeficiency virus (HIV1, HIV2) |
| Hepatitis viruses (A, B, and C) |
| Hantaviruses (Hantaan, Sep8In Nombre) |
| BACTERIA |
| Mycoplasma spp. |

4.7.3. Rodent profiles:

4.7.3.1.

| | | | |
|--|---|---|---|
| Mouse cytomegalovirus | | | Z |
| Mouse hepatitis virus | Z | | Z |
| Murine norovirus | Z | | Z |
| Mouseparvovirus(MVM, MPV15) | Z | | Z |
| Mouse T lymphotropic virus | | | Z |
| Orthoreovirus | Z | Z | Z |
| Pneumonia virus of mice | | | Z |
| Polyomavirus | Z | Z | Z |
| Rat cytomegalovirus | | Z | Z |
| Rat minute virus | | Z | Z |
| Rat parvovirus | | Z | Z |
| Sendai virus | Z | Z | Z |
| Sialodacryoadenitis virus, Rat coronavirus | | Z | Z |
| Theilovirus | Z | Z | Z |
| Toolan's H1 | | Z | Z |
| BACTERIA | | | |
| Mycoplasma pulmonis | Z | Z | Z |
| Mycoplasma spp | | | |

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| 2019.11.20 | 4.3.3. If the entire research protocol will be conducted in a Biocontainment Level 2 (BCL2) facility, and the animals will not be moved to another McGill facility at any point, testing of rodent biologicals prior to use can be eliminated per veterinarian approval required. |
| | <p>4.3.1. Human cells should be tested for human pathogens if donor's status is unknown. Otherwise biological material should be handled under appropriate Biosafety Level</p> <p>4.4.1. Material should be tested for human pathogens as detailed in section 4.5.1 and the corresponding rodent profile detailed in section 4.5.2.</p> <p>4.4.2. If the entire research protocol using material of untested or unknown human origin will be conducted in a Biocontainment Level 2 (BCL2) facility, and the animals will not be moved to another McGill facility at any point, testing of materials prior to use is not required.</p> |
| 2019.11.20 | 4.4.3. If credible documentation is available that the material has never been passaged through or established in rodents, or exposed to rodent products, e.g., rodent-derived feeder cells, serum, testing of materials for rodent pathogens p |

Annex 1 – Guidelines for testing of biological material

| NOT TESTED | TESTED |
|--|--|
| Biological material originating from the same animal facility. | Biological material originating from outside a McGill animal facility within the virtual facility network. |
| Biological material originating from a McGill animal facility within the virtual facility network with same or higher Bioexclusion Level with veterinarian's approval. | Biological material originating from a McGill animal facility within the virtual facility network with a lower Bioexclusion Level. |
| Biological material for which detailed documentation of previous testing is available with veterinarian's approval. | Biological material originating from an unknown source. |
| Biological material that will be used in a study conducted in its entirety in a Biocontainment Level 2 (BCL2) facility. | Biological material of human origin where donor status is unknown. |
| | Biological material for which no detailed documentation of previous testing is available. |