

Standard Operating Procedures Lentivirus and Lentivirus Vector Usage in Ferrets

The procedures described below should be utilized only when the common, well described replication incompetent retroviral vectors (and packaging systems) are inoculated into ferrets.

1. Inoculation

- a. Injections to take place in surgery room within a biosafety cabinet (BSC).
 - i. Typical personal protective equipment (PPE) should be utilized during the procedures.
 - ii. If a BSC cannot be used, the following procedures and PPE should be used:
 1. Door closed, access limited
 2. PPE:
 - a. Disposable, solid front gowns
 - b. Safety glasses/face shield
 - c. Gloves
 - d. Sleeve covers
 3. Disinfect surfaces before/after
 4. Syringes preloaded in BSC

2. Recovery Period

- a. Ferrets should be treated as BL2 during the recovery period (8-10 hours per guidance by NIH¹).
 - i. Label the cage with a biohazard label, virus utilized, route of injection, date of injection, and personnel contact information.
 - ii. Cage utilized in the BL2 facility must be either autoclaved or spray disinfected. Alternatively, disposable cages can be used and disposed in biohazard bag.
 - iii. Bedding, food, and water bottles utilized in the BL2 facility are placed in a bio-hazard bag and autoclaved.
 - iv. Biohazard bags must be removed from the autoclave by the lab personnel in a timely manner and disposed of per Brandeis Biohazardous Waste Regulations.

3. Post Recovery

- a. After recovery period, the ferret is transferred to a new cage and returned to the animal facility. At this point, BL1 practices are acceptable for animal containment and handling.

¹ NIH RAC. Biosafety Considerations for Research with Lentiviral Vectors.
http://oba.od.nih.gov/oba/rac/Guidance/LentiVirus_Containment/pdf/Lenti_Containment_Guidance.pdf