UiO : Faculty of Medicine		
Instruction concerning work with Sendai-virus (BSL-2)		Edition: 1 Page : 1 of 1 Filing number in ePhorte:
Elaborated for NCMM: HSE coordinator: Liv Bjørland	Approved: **: Group leader Judith Staerk**	Date : 22.02.17

Information

- Sendai virus (SeV) is classified as mouse parainfluenza virus type I belonging to the *Paramyxoviridae* family. SeV is considered nonpathogenic to humans. The virus infects cells by attaching itself to the sialic acid receptor present on the surface on a wide range of cell types, also human brain.

- SeV must be used under containment Biosafety Level 2 (BSL-2). SeV is transmitted by aerosol and contact with respiratory secretions. The virus is highly contagious, and appropriate care must be taken to prevent the potential mucosal exposure to the virus. In the event that the virus comes into contact with skin or eyes, decontaminate by flushing with plenty of water and consult a physician.

- CytoTune™-iPS 2.0 Sendai reprogramming vectors (Invitrogen) do not integrate into the host genome and remain in the cytoplasm. The gene encoding F fusion protein is deleted from the reprogramming vectors, rendering them incapable of producing infectious particles from infected cells. However, animals that have already been infected with wild type SeV may be able to make infectious CytoTune™. 2.0 Sendai virus.

Instruction for the lab

- Fill in your credentials in the log book to verify your use of the room.
- Before you leave the room the bench and work place must be disinfected.
- Keep the security-bench tidy – never put more into the bench than you necessarily need. Do not leave the room untidy.
- Sign for accomplished tasks in the log book before you leave the room.
- This lab is used by several groups. Each group has to refill their own equipment.

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1. Restricted access to the room must be implemented when SeV take place. Work with Lenti-virus should not take place at the same time.

2. Always use lab-coat and gloves according to our instructions for protection, and wash your hands after you have finished your work.

3. All samples should be centrifuged with their caps on to prevent danger of aerosols outside the security-bench. Use spectacles and filter-mask P3 for virus to prevent mucosal exposure/splash. Caps should be removed inside the bench.

4. Avoid needles and sharps during your work. Any sharps must be put in plastic tubes before discharged off.

5. Put all contaminated equipment into autoclave-able bags. Close the bag when it is still inside the security bench. (Contact the wash facility for refill of bags)

6. Close the bag and discharge into the box for Lenti-virus when the work is finished and before you leave the room. Notify Liv when the box is full and never continue the work before the box is replaced. All virus-work is autoclaved for an hour at 121 degrees before it is sent for incineration.

7. Decontaminate all medium from the Vacu-safe in 2% Virkon overnight before discharging off the solution into the sink. Remember to disinfect the VACU-pump system after each time it is used. Preferably use pipette to remove high titers of virus.

8. Any other biological or contaminated material goes into the yellow boxes.

9. If any spill on the floor, bench or in centrifuge -> soak up as much as possible and handle the paper as contaminated waste (as above). Decontaminate the area for 10 min with 1% Virkon. Decontaminate for 30 min if the contamination is visible. If horizontal surface cover the area with absorbing paper and soak with disinfectant. Rinse, and at last disinfect with 70% of ethanol.

10. Disinfection of the incubator, disinfect with Barricydal/Barrydin and rinse. The replacement for Barricydal is Chemgen HDH_4L (1%) . Use 70% ethanol afterwards.

11. Always disinfect with 1% SDS in 70% ethanol when the work is finished and you leave the room. Use 70% in the end to remove the SDS.