PSDS
PATHOGEN SAFETY DATA SHEET

Sendai Virus Vector System

CHARACTERISTICS

Synonym or Cross Reference	SeV, Murine parainfluenza virus type 1 and Hemagglutinating virus of Japan
Disease	In rodents- causes respiratory tract infection; in humans the pathogenicity is unknown
Morphology	Single-stranded, negative-sense, RNA virus in the Paramyxoviridae family; enveloped. Often used to create iPSCs for cell reprogramming. Does not integrate into host genome. Also known as Hemaglutinating Virus of Japan and Murine Parainfluenza Virus Type 1.
Zoonosis	None

RISK GROUP & CONTAINMENT REQUIREMENTS

ABSL-2	For all procedures utilizing infected animals.
BSL-2/BSL-2+	Perform all procedures in a BSC unless otherwise approved and stated in lab-specific manual. Raise containment level to BSL-2+ if oncogenic trangenes are used.
Risk Group 2	Agents that are associated with human disease which is rarely serious and for which preventive or therapeutic interventions are often available.

LABORATORY HAZARDS

Primary Hazards	Parenteral injection. However, the virus does not cause disease in humans or domestic animals.
Sources	Other samples described in IBC protocol.
Lab Acquired Infections (LAIs)	None have been reported.

PERSONAL PROTECTIVE EQUIPMENT

Additional Precautions	Additional PPE may be required depending on lab-specific SOPs and IBC Protocol.
Minimum PPE Requirements	Lab coat, disposable gloves, safety glasses, closed toed shoes, long pants.

SPILL PROCEDURES

Large	Immediately notify all lab personnel and clear the area. Remove any contaminated PPE/clothing before exiting the lab. Lock all entry doors, post warning signage, and deny entry. Call DPS (213-740-4321) and ask to notify EH&S. Inform the PI and/or Lab Manager/Supervisor as soon as possible.
Small	Notify all lab personnel lab. Remove contaminated PPE and don new PPE. Cover spill area with absorbent material and add fresh 1:10 bleach:water. Allow 20 minutes (or as directed) contact time. After 20 minutes, clean up and dispose of materials.

VIABILITY

Disinfection	Use 10 % dilution of household bleach (minimum 0.3% sodium hypochlorite) for 20 to 30 minutes, or an acceptable time approved by IBC and EH&S.
Survival Outside Host	Labile in the environment.

HEALTH HAZARDS

Host Range	Rodents (mice and rats); vectors can infect human cells, but particles are non-infectious.
Incubation Period	In rodents: up to 12 days.
Infectious Dose	Unknown
Modes of Transmission	Accidental puncture of the skin, exposure of mucous membranes.
Signs and Symptoms	Flu-like symptoms and respiratory infection.

EXPOSURE PROCEDURES

Medical Follow-up	Visit USC's designated healthcare provider. Bring a copy of this PSDS.
Mucous Membrane	Flush eyes for 5-10 minutes at eyewash station.
Other Exposures	Immediately wash affected area with soap and water for 15 minutes.
Reporting	Immediately report incident to supervisor, notify EH&S, and complete Manager's Report.

MEDICAL PRECAUTIONS/TREATMENT

Prophylaxis	None
Surveillance	Monitor for symptoms of infection.
Treatment	You should inform the physician of any drug resistance(s) acquired by the lab strain(s) and any sequences inserted into the lab strain(s).
USC Requirements	Immediately report any exposures to Environmental Health & Safety.
Vaccines	None available

REFERENCES

BMBL
http://tiny.cc/cdc-bmbl

CDC
https://www.cdc.gov/

NIH Guidelines
http://tiny.cc/nih-bio-secure

Virginia Tech
http://tiny.cc/vt-psds