

CHARACTERISTICS

Synonym or Cross Reference	Retroviruses that are generated in vitro by the multi-plasmid transfection of mammalian cells.
Disease	Lentiviruses can integrate into the host cell genome and thus pose some risk of insertional mutagenesis. During an accidental exposure to Lentiviral vectors, seroconversion towards HIV-1 viral proteins could result and health provider should be contacted.
Morphology	Consist of recombinant transgene sequences, and viral packaging and regulatory sequences flanked by lentiviral long terminal repeats (LTRs). Viral structural genes are removed. Lentiviruses are enveloped viruses that have the ability to integrate into host chromosomes and to infect non-dividing cells. Lentiviruses include HIV and SIV.
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 transgenes are used.
Risk Group 2	Agents that are associated with serious or lethal human disease for which preventive or therapeutic interventions may be available.

LABORATORY HAZARDS

Primary Hazards	Parenteral injection
Sources	Cultures, frozen stocks, 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	Rapidly inactivated when exposed to drying/ environmental conditions.

HEALTH HAZARDS

Host Range	Humans, animals
Incubation Period	Variable- can be days to years.
Infectious Dose	Variable
Modes of Transmission	Ingestion, penetration through skin, contact with mucous membranes (mouth, eyes, nose).
Signs and Symptoms	Lentivirus infection: lymphadenopathy, fever, diarrhea, fatigue, weight loss, unexplainable opportunistic infections.

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	None
USC Requirements	Immediately report any exposures to Environmental Health & Safety.
Vaccines	None available

REFERENCES

BMBL http://tiny.cc/cdc-bmb1	CDC https://www.cdc.gov/
NIH Guidelines http://tiny.cc/nih-bio-secure	Virginia Tech http://tiny.cc/vt-psds

