

Modification Form for Permit BIO-LHRI-0083

Permit Holder: Ting Yim Lee

Approved Personnel

(Please stroke out any personnel to be removed)

Lisa Hoffman

Additional Personnel

(Please list additional personnel here)

	Please stroke out any approved Biohazards to be removed below	Write additional Biohazards for approval below. *
Approved Microorganisms	Lentivirus	
Approved Cells	[Primary] - (rodent): muscle satellite cells, primary myoblasts. [Established] - (human): LoVo, NCI-H1299, PC-3, HEK, 293T. (rodent): C2C12, C6.	
Approved Use of Human Source Material		
Approved GMO	[Vector] - ViraPower Promoterless Lentiviral Vector. [Plasmid] - Myogenin promoter, trifusion reporter, lipofectamine	
Approved use of Animals	Mouse (AUS 2008 - 067)	
Approved Toxin(s)	Cardiotoxin	Cardiotoxin - see attached MSDS

* PLEASE ATTACH A MATERIAL SAFETY DATA SHEET OR EQUIVALENT FOR NEW BIOHAZARDS.

** PLEASE ATTACH A BRIEF DESCRIPTION OF THE WORK THAT EXPLAINS THE BIOHAZARDS USED AND HOW THEY WILL BE USED.

Classification: 2+

Date of last Biohazardous Agents Registry Form: Jul 23, 2009

Signature of Permit Holder:

BioSafety Officer(s):

Chair, Biohazards Subcommittee:



Note: this product is distributed in so minor quantities that, despite a possibly high level of toxicity, its potential hazard on the environment is negligible.

Cat. No. L81 02

December 6, 1994 Revised J.T. St. Joseph's Aug 31, 2009

CARDIOTOXIN

SECTION I IDENTIFICATION

Chemical Name: CARDIOTOXIN
Synonym: CYTOTOXIN
Formula: 60-amino acid peptide with 4 S-S bridges.

SECTION II HAZARDOUS INGREDIENTS DATA

Hazardous Components: Same as section I (single compound)

SECTION III PHYSICAL DATA

Boiling Point : N/A : Volatile by Volume : N/A
Vapor Pressure at Temperature : N/A : Evaporation Rate (Butyl Acetate = 1) : N/A
Vapor Density : N/A : Specific Gravity : N/E
Solubility in water : Good : Melting Point : N/A
Appearance and odor : Crystalline or amorphous powder.

SECTION IV EXPLOSION AND FIRE HAZARD DATA

Flash Point: : N/A : Flammable Limit: N/A
Test Mode : ---

Extinguishing Media: Water, carbon dioxide, dry chemical powder, foam.

Special Fire Fighting Procedure: Firefighters must wear self-contained breathing apparatus and fully protective equipment.

Unusual Fire and Explosion Hazards: Smoke or fumes from burning may be toxic or irritating.

LATOXAN provides the information contained herein in good faith, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. LATOXAN makes no representations or warranties, either expressed or implied of merchantability, fitness for particular purposes with respect to the information set forth herein or to which the information refers. Accordingly LATOXAN will not be responsible for damage resulting from the use of or reliance upon this information.

N/A = Not Applicable

N/E = Not Established

CARDIOTOXIN

SECTION V HEALTH HAZARD

Biological activity: Protein Kinase C inhibitor.

Toxicity: LD₅₀ (mice, i.v.): 1.5 mg/kg
Route(s) of Entry: Inhalation: N/E Skin: N/A Ingestion: Yes
Health Hazards (acute and chronic): Toxic.
Medical Conditions Generally Aggravated by exposure: N/E

Signs and Symptoms of Exposure: N/E.

Emergency and First Aid Procedures:

Skin contact : Wash affected area with copious amounts of water.
Eye Contact : Flush eyes with water for at least 15 minutes.
Inhalation : Remove to fresh air. Give oxygen or artificial respiration as needed.
Ingestion : Call physician immediately.

Seek medical treatment if discomfort persists.

SECTION VI REACTIVITY DATA

Stability : Stable.
Conditions to Avoid : N/E
Incompatibility : N/E
Hazardous Decomposition Products : N/E
Hazardous polymerisation : N/A

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be Taken in case Material is Released or Spilled: Wear self-contained breathing apparatus, rubber boots and gloves. Sweep up. Do not raise dust. Wash and ventilate spill site after pickup is complete. Do not allow material or wash water to enter natural waterway.

Waste Disposal Method: Mix waste with a combustible carrier and burn in a suitable equipped chemical incinerator.

Disposal must comply with Federal, state and local regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respirator Protection : Mechanical filter type.
Ventilation : Mechanical.
Protective Gloves : Nitrile rubber (J.T. St. Joseph's Aug 31, 2009)
Eye Protection : Goggles.
Other Protective Equipment : Store dry in tight container.
Should be handled only by qualified, experienced professionals.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storage: Keep storage container tightly closed. Avoid prolonged or frequent exposure. Wash thoroughly after handling.



Biosecurity Requirements for Facilities Using Biological Agents

- (1) Biological agents protected by a lock. For example, biological agents in a freezer, fridge, laboratories or other type of container must be locked after-hours/if no one present.
- (2) The supervisor must ensure that each person has the qualifications and training to do the work without supervision.
- (3) Visitors must be accompanied.
- (4) The supervisor must keep a current inventory and a list of the location(s) where the biological agent(s) are stored and handled.
- (5) Labelling to identify samples and the container in which they are stored.
- (6) Notify the biosafety officer if a sample is lost, stolen, or otherwise misused.
- (7) Notify Campus Community Police Services of suspicious behaviour.

There are two additional requirements for Facilities Using or Storing Biological Toxins:

- (8) Do not keep on hand more than the amounts regulated by the United States Select Agents regulation: www.selectagents.gov/index.htm/
- (9) For best practices, it is recommended to use or handle less than one human dose at any given time.