Risk Assessment Form (3)

Must be completed before experimentation.

Student's Name(s) Vyom Shah

Title of Project Linking Diet and Cancer: Arachidonic Acid Augments Canonical Wnt Signaling to Enhance Stemness

To be completed by the Student Researcher(s) in collaboration with Designated Supervisor/Qualified Scientist:
(All questions must be answered; additional page(s) may be attached.)

1. List all hazardous chemicals, activities, or devices that will be used; identify microorganisms exempt from pre-approval (see Potentially Hazardous Biological Agent rules).
   See attached

2. Identify and assess the risks involved in this project.
   See attached

3. Describe the safety precautions and procedures that will be used to reduce the risks.
   See attached

4. Describe the disposal procedures that will be used (when applicable).
   See attached

5. List the source(s) of safety information.
   See attached

To be completed and signed by the Designated Supervisor (or Qualified Scientist, when applicable):
I agree with the risk assessment and safety precautions and procedures described above. I certify that I have reviewed the Research Plan/Project Summary and will provide direct supervision.

Semir Beyaz		6/26/2019
Designated Supervisor's Printed Name	Signature	Date of Review (mm/dd/yy)
Principal Investigator	beyaz@cshl.edu / 516 367-4128	
Position & Institution	Phone or email contact information	
Cold Spring Harbor Laboratory		

Experience/Training as relates to the student's area of research

Risk Form (3)

1. TRIzol(Zymo Research California R2050-1-5u),
2. TRIzol is toxic if touched, inhaled or swallowed. May cause organ damage or genetic defects if exposed repeatedly.
3. Wash skin thoroughly after handling. Do not eat, drink or smoke when using TRIzol. Wear protective clothing and face protection while using TRIzol. If swallowed, contact poison control and rinse mouth. If exposed or concerned: get medical attention. Do not breathe fumes emitted by TRIzol. Handle materials in a vacuum fume hood.
4. TRIzol and container will be disposed in specified hazardous material bins prior to proper biosafety pickup.
5.

[1] International Union of Pure and Applied Chemistry and World Health Organization. Chemical Safety Matters. Cambridge: Cambridge University Press, 1992. ISBN 0-521-41375-3 paperback.

Risk Form (3)

1. PGE2 (Sigma Aldrich USA, P0409),
2. PGE2 has acute oral toxicity and reproductive toxicity. Do not ingest and avoid consumption near PGE2.
3. PGE2 causes severe skin burns and extreme eye damage. PGE2 yields extreme single exposure respiratory toxicity. Do not ingest and avoid consumption near PGE2. Avoid direct inhalation of PGE2.
4. PGE2 and container will be disposed in specified hazardous material bins prior to proper biosafety pickup.
5.

[1] "Prostaglandin E2P0409," Sigma. [Online]. Available: https://www.sigmaaldrich.com/catalog/product/sigma/p0409?lang=en®ion&gclid=CjwKCAiA8ejuBRAaEiwAn-iJ3qFDvXZ6kCFUD6z-OzdKjIaW07EvcqS14fJo2vwjo1s2lqcOJaN0EhoCECUQAvD_BwE. [Accessed: 26-Nov-2019].

Risk Form (3)

1. Digitonin(Abchem Boston, ab141501)
2. Digitonin is toxic if swallowed, inhaled or touched.
3. Wash skin thoroughly after handling. Do not eat, drink or smoke when using Digitonin. Wear protective clothing and face protection while using Digitonin. If swallowed contact poison control and rinse mouth. If exposed or concerned, get medical attention. Do not breathe fumes emitted by Digitonin. Handle materials in a vacuum fume hood.
4. Digitonin and container will be disposed in specified hazardous material bins prior to proper biosafety pickup.
5.

[1] Meers M, Bryson T, Henikoff S (2019), A streamlined protocol and analysis pipeline for CUT&RUN chromatin profiling. bioRxiv 569129; 10.1101/569129

Risk Form (3)

1. sodium hypochlorite (Fisher Chemical, 7681-52-9,7732-18-5)
2. sodium hypochlorite causes severe skin burns and extreme eye damage. Sodium hypochlorite yields extreme single exposure respiratory toxicity. Do not ingest and avoid consumption near sodium hypochlorite. Avoid direct inhalation of sodium hypochlorite.
3. Wash skin thoroughly after handling. Do not eat, drink or smoke when using hazardous materials. Wear protective gloves/ protective clothing/ eye protection/ face protection. If swallowed contact poison control and rinse mouth. If exposed or concerned: get medical advice/ attention. Do not breathe dust/fume/gas/mist/vapors/spray emitted by sodium hypochlorite. Handle materials in a vacuum fume hood.
4. sodium hypochlorite and container will be disposed in specified hazardous material bins prior to proper CSHL biosafety pickup.
5.

[1] "sodium hypochlorite," sodium hypochlorite Solution (5.65-6%/Laboratory), Fisher Chemical | Fisher Scientific. [Online]. Available: https://www.fishersci.com/shop/products/sodium-hypochlorite-solution-5-65-6-laboratory-fisher-chemical-2/SS2901. [Accessed: 16-Jan-2020].