

Risk Assessment Form (3)

Must be completed before experimentation.

Student's Name(s) Tej Verma

Title of Project Determining the effects of iron oxide nanoparticles on the inhibition of macropinoc

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).
Biological Agent, RAW264.7 murine macrophages (biosafety level 2); Chemical, amiloride hydrochloride (acute toxicity); Chemical, 5-(N-Ethyl-N-isopropyl)amiloride (acute toxicity; skin/eye irritant; organ toxicity); Chemical, ethidium bromide (human carcinogen); Chemical, hydrochloric acid (corrosive); Device, Nikon Ti-E fluorescence microscope (laser radiation)
2. Identify and assess the risks involved in this project.
Risks associated with this project include exposure to potentially harmful chemicals, foreign biologic agents, and sources of high intensity light radiation.
3. Describe the safety precautions and procedures that will be used to reduce the risks.
Due to carcinogenic risk, handling of ethidium bromide and ethidium bromide-treated cells will be performed only by the designated supervisor. All other hazardous chemicals will be handled under appropriate conditions and methods with proper personal protective equipment. Biologic agents will be handled only inside a level 2 biosafety cabinet.
4. Describe the disposal procedures that will be used (when applicable).
Ethidium bromide will be disposed of by the designated supervisor only in waste vessels specifically designated for ethidium bromide waste. All other chemicals will be disposed of in acidic or organic chemical waste, as appropriate. Biologic agents will be disposed of only in biohazard waste containers. Hazards from laser radiation will be mitigated by placing all radiation sources behind an optical plastic filter.
5. List the source(s) of safety information.
For chemical agents, safety info is listed on material safety data sheets (MSDS). For biologic agents, safety info is listed in the relevant datasheet provided by ATCC. For laser radiation sources, safety info is listed in the manufacturer's documentation provided by Nikon Corp.

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.

Evan Stater

Designated Supervisor's Printed Name

Ea Stater
Signature

5/12/19

Date of Review (mm/dd/yy)

Graduate student researcher, MSKCC

Position & Institution

646-888-3101

Phone or email contact information

Lab safety training, chemical disposal training, microscopy training

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