UCSF Office of Research
Institutional Animal
Care and Use Program

In Vivo Lymphocyte Homing in Mice
IACUC Standard Procedure
Effective Date: August 2022

Description of procedure:

Donor mice will be euthanized per the UCSF Euthanasia Guidelines and lymphoid organs will be harvested to prepare leukocytes for injection into recipients of the same genetic background. These leukocytes may be labeled with a non-toxic fluorescent dye for tracking purposes. Recipient mice will be kept warm to facilitate vasodilation and restrained briefly in a mouse restrainer. Optionally, at time 0, antibody or other test compounds in sterile saline may be injected IV into the tail vein per the UCSF Tail Vein Injection procedure. After a defined period (e.g. 1 hour to 1 day), the mouse is injected by IV into the tail vein with the desired number of leukocytes (typically between 10^6 and 10^7) from the donor mice in sterile saline. Alternatively recipient mice are anesthetized and cells transferred by Retro Orbital Injection. The mouse is returned to the cage. Endpoints for experiments are varied (minutes to days) and the timeline will be specified in the individual protocol.

Agents:

This procedure requires fluorescent dye, test compound, and sterile saline. All agents administered to animals should be listed in the "Agents" section of the RIO IACUC protocol.

Adverse Effects:
Adverse effects should be listed in the “Adverse Effects” section of the RIO IACUC protocol.

Examples of potential adverse effects include: Reaction to agent including lethargy and labored breathing