Date:

Your name:

Protocol #:

Protocol Title:

Type: (3yr Rewrite or Amendment?)

What **mouse strains** (strain means genotype) including official Jax name, if available:

**The control/background strain of mice that we will use are:**

**Age and sex of mice:**

**Do animals in this protocol have a known phenotype that requires special housing, husbandry or veterinary-related considerations or any other condition which makes them distinguishable from wild-type animals:**

**Yes\_\_\_\_\_\_No\_\_\_\_\_\_\_**

**Clinical Problems with GMO animals:** For each strain, please describe any clinical problems or abnormalities, and any special care or housing requirements that these animals may require.

**Animal Identification:**

**Example:** Mice will be identified by ear tagging. If procedures are done on neonatal mice that then need to be individually identified, we will use toe-clipping (< 7 days of age).

**Procedures to be done on living mice:**

**Experiments to be done:**

*INSTRUCTIONS: This includes a* ***description of the question you are addressing*** *and* ***the sequence of steps that you will take*** *(from the point of view of what the animal will experience). Then a separate section that describes the number of animals and a justification.*

Experiment name:

Experimental design/ Rationale:

Procedures (for each experiment described):

Timeline of each procedure:

**Animal Number Justification:**

Provide scientific justification for all the animals you will need to accomplish your study. Justify all animals that will be used for all procedures, including breeding. If necessary, include a statistical analysis to justify the number of animals you are requesting.

**Number of mice** -- number of groups x mice per group -- need to justify the number. For example, a power calculation or some other justification.

**Example: the total mouse number here will be** x\*y\*z= TOTAL mice per year.

**Anything to be injected into mice:**

 - pharmaceutical grade if available

 - if not pharmaceutical grade, a reason why not (e.g. not available). Price is not a reason.

**Any health problems expected for mice:**

 - what possible problems

 - how will you monitor for problems

 - what will you do if you detect problems

 - criteria for early euthanasia

Will the pain or distress in this protocol be (check both if applicable):

Alleviated with anesthesia and/or analgesia \_\_\_\_\_\_\_\_

Unalleviated \_\_\_\_\_\_

**Pain or distress - clinical signs:**

Please describe clinical signs to be expected in animals resulting from the proposed procedures.

**Pain or distress – monitoring:**

Please indicate monitoring frequency and duration of each clinical sign you plan to monitor.

**Pain or distress - alleviating non-medically:**

**Literature search for alternatives:**

 - for any surgical procedure

 - any procedure that causes more than momentary pain or distress

Search strategy:

Database: Pubmed

Dates:

Date of search:

Narrative: *The narrative must address why less painful or distressful alternatives cannot be used to achieve the scientific goals of the study.*