NORTHERN ARIZONA UNIVERSITY | Office of Regulatory Compliance

rDNA – Transgenic Animals

Document of Registration # **(Added by BSO)**

Directions:

- The content of this IBC application should describe all work with transgenic animals to be conducted by a Principal Investigator (PI).
- There is no limit to the number of applications a single investigator can submit, nor are there limitations as to how often this application is updated to incorporate an increase or change in scope.
- If you need assistance filling out this form, please contact Shelley Jones, the NAU Biological Safety Officer (BSO), at (928) 523-7268 or shelley.jones@nau.edu.
- Submit the completed application electronically to biosafety@nau.edu, by mail (Shelley Jones, Bldg. 56, P.O. Box 4073), or by fax (928) 523-0050. Retain a copy of your completed application for your records.

Section 1: General Information

Principal Investigator: _____ Title: _____

Department: _____ Campus Address: _____

Primary Work Phone Number: _____ Email: _____

Laboratory Contact: _____ Title: _____

Department: _____ Campus Address: _____

Primary Work Phone Number: _____ Email: _____

Project Title:

Purpose of Project:

Animal Type:

Housing Building & Procedure Room Numbers:

IACUC Protocol Number:

Section 2: Acquiring Transgenic Animals

1. Will you be purchasing/obtaining "ready made" transgenic animals?
   ☐ Yes ☐ No
   If yes, from where/who?

2. Will you make your transgenic animals within your research group?
   ☐ Yes ☐ No

If yes, which method will be used to make the transgenics?

- ☐ Microinjection of gene constructs into pronuclear fertilized oocytes
- ☐ Insertion of gene constructs into embryonic stem cells that are microinjected into oocyctes
- ☐ Vector-mediated transfer of construct to embryonic stem cells for microinjection into oocyctes
  - What Vector?
  - What titer (particles/ml) of vector used?
- ☐ Other method
  - Please explain:

3. Will you make your transgenic animals with the help of another research group?
   ☐ Yes ☐ No

   If yes, which method will be used to make the transgenics?
   - ☐ Microinjection of gene constructs into pronuclear fertilized oocytes
   - ☐ Insertion of gene constructs into embryonic stem cells that are microinjected into oocyctes
   - ☐ Vector-mediated transfer of construct to embryonic stem cells for microinjection into oocyctes
     - What Vector?
     - What titer (particles/ml) of vector used?
   - ☐ Other method
     - Please explain:

4. Will you *use* transgenic animals, but none of the above categories are applicable?
   ☐ Yes ☐ No

   If yes, please explain:
5. Will you *construct* transgenic animals, but none of the above categories are applicable?
   ☐ Yes ☐ No

   If yes, please explain:

Section 3: About the Transgenic Animals

1. Using knock-outs? ☐ Yes ☐ No

   If yes, please list:

   Gene name(s): Gene(s) function(s): Gene(s) source(s):
2. Using “knock-ins” (gene is inserted)? ☐ Yes ☐ No

   If yes, please list:

   Gene name(s): Gene(s) function(s): Gene(s) source(s):
3. Is/are the gene(s) an oncogene? ☐ Yes ☐ No
4. Does/do the gene(s) encode a toxin? ☐ Yes ☐ No
5. Does/do the gene(s) encode any other hazardous agent? ☐ Yes ☐ No

   If yes, what is the agent?

Section 4: Gene Construct(s); Complete only if using ready made animals

1. In what building & room numbers will the rDNA/gene construct(s) be made?
2. What vector(s) will be used to create the gene construct(s)?
3. What cell type(s) will be used to create and/or package the gene construct(s)?
4. Discuss the safety precautions that will be used when handling the vector(s), cells, and constructs:

5. What hazards exist in terms of an accidental injection of the construct(s) to one of your staff members? Discuss both vector and gene hazards.

6. Please attach a map of the construct(s) showing (as applicable) promoter, enhancer, gene to be expressed, splice donor and acceptor, intron sequences, and termination/polyadenylation sequences.

Section 5: Signatures and Acknowledgement of Responsibilities

The undersigned individual(s) will be involved in the experimentation describe above. They are familiar with and agree to abide by the current NIH guidelines.

Name (Please Type)	Signatures	Date

I attest to the fact that these individuals are properly trained in the area of recombinant DNA experimentation. Furthermore, I agree to comply with the NIH requirements pertaining to shipment and transfer of recombinant DNA materials. I am familiar with and agree to abide by the provisions of the current NIH Guidelines and other specific NIH instructions pertaining to the proposed project. The information above is accurate and complete.

Principal Investigator Date

Biological Safety Officer Date