DF/HCC Mouse Engineering Core
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IN VITRO GENE TARGETING APPLICATION

CONTACT INFORMATION

Date: ____________________________________ Project Name: ____________________________

Principal Investigator: ________________________

Institution: ________________________________ Department: ____________________________

Address: __________________________________

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Phone: ___________________________________ Email: _________________________________

Lab Contact: _______________________________

Phone: ___________________________________ Email: _________________________________

ADDITIONAL INFORMATION

1. **Do you receive industrial support for:**
   a. any portion of your salary, or the salary of individuals working under your supervision, on the project in which the transgenic mouse will be used? ☐ Yes ☐ No
   b. the research project in which the transgenic mouse will be used? ☐ Yes ☐ No
   c. purchase of supplies, reagents, animals, tissues or cells which will be used in the research project for which the transgenic mouse is requested? ☐ Yes ☐ No

2. **Do you have any active agreements with industry for the <u>same</u> scope of work for which the transgenic mouse will be used?** ☐ Yes ☐ No

   If you answered "Yes" to Questions 1 or 2, please explain briefly:

3. **Will the transgenic mouse be used in conjunction with any other Material(s) received (not purchased) from another institution, company or any other third party?** ☐ Yes ☐ No

   If “Yes”, please identify the other Material(s) and where it/they came from:

   If “Yes”, was there any Agreement, Statement of Investigator Form, letter of intent or correspondence of any kind between you and the provider of the Other Material(s) stating conditions, restrictions, or guidelines under which the Other Material(s) would be used? ☐ Yes ☐ No

4. **Do you anticipate reporting the results generated from the studies using the transgenic mouse to any for-profit entity?** ☐ Yes ☐ No

   If “Yes”, please identify the for-profit entity:

5. **Scientific Rationale**

   Briefly describe the specific aim of the study, and the rationale for generating this knockout strain.

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6. **Animal Protocols**

   Provide the appropriate protocol number(s) for project obtained from the Harvard IACUC.

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7. DNA Construct

NOTE: We require a minimum of 60 *ug* of DNA (2 – 4 *ug/ ul*) for the electroporation.

Attach a schematic diagram of the DNA construct. Please include restriction map, location and size of exons and introns, and drug resistance genes used.

a. What is the concentration of your DNA solution? ____________________________________

b. Indicate how the concentration was determined.

c. How was the construct linearized?

8. Electroporation into Embryonic Stem Cells

Which type of ES cells should be targeted? ☐ JM8 ☐ J1 ☐ NOD

Which drug selection gene should be applied after electroporation?

☐ G418 selection against Neomycin ☐ Ganciclovir to select against TK

☐ Hygromycin ☐ Puromycin

Will you be using diphtheria toxin? ☐ Yes ☐ No

ADDITIONAL INFORMATION (CONTINUED)

9. Genotyping

NOTE: The Core facility will provide the investigator with 192 DNA samples to genotype unless otherwise specified before the project begins.

Please describe genotyping strategy.

For Core Use Only:

Work Request/Case Number(s): ______________________
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