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| **A close up of a logo  Description automatically generated**  **Exemption Review**  **Mahidol University-Institute Animal Care and Use Committee**  **(MU-IACUC)** |

**COVER SHEET**

**Overview**

This section will be completed by the MU-IACUC

|  |  |
| --- | --- |
| **Protocol number** | **F02 -** |
| **Date of submission** (dd/mm/yy) |  |
| **Date of Request modification** (dd/mm/yy) |  |
| **Date of Resubmitted** (dd/mm/yy) |  |
| **Date of Approved/Disapproved** (dd/mm/yy) |  |
| **Date of Expiration** (dd/mm/yy) |  |

**1. Protocol title:**

(Thai)

(English)

1.1 This protocol is a part of the main research project entitled (if applicable)

(Thai)

(English)

1.2 Principal investigator of the main research project (if applicable)

Name

Position Department

Faculty/Institute

**2. Principal investigator of the submitted protocol:** *For a student thesis, principal investigator is the principal adviser and student is a co-investigator*

Name

Position: Department Faculty/Institute

Tel. E-mail

\* Animal use license no Expired date

*\*Issued by Institute of Animal for Scientific Purposes Development, NRCT***3. Co-investigators of the submitted protocol**

**3.1 Co-investigators directly involved with animals**

**3.1.1** Name

Position: Department Faculty/Institute

Tel. E-mail

\* Animal use license no Expired date

**3.1.2** Name

Position: Department Faculty/Institute

Tel. E-mail

\* Animal use license no Expired date

**3.2 Co-investigators NOT directly involved with animals**

**3.2.1** Name

Position: Department Faculty/Institute

Tel. E-mail

**3.2.2** Name

Position: Department Faculty/Institute

Tel. E-mail

**4.** **Contact person in case of emergency**:

Name

Position: Department Faculty/Institute

Work phone Mobile phone

E-mail

**5.** **Type of animal protocol (may select more than one category)**

Research: In the Field of

Testing/Monitoring (please specify)

Biological Production: (please specify)

Animal Breeding (please specify)

Other (please specify) **6.** **Duration of Protocol:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Period for which the protocol is required  (must not exceed three years) | | Years |  | Months |  |
| Start date |  | End date | |  | |
| Please submit your application one to two months (preferably two months) before your planned start date. | | | | | |

(The start date has to be after the date of application submission. Please note that no animal use may occur until the Animal Ethics Committee approves, and all animal use must be finished before the end date. The date format is dd/mm/yyyy.)

**7. Funding source(s):**

Received from

Funding period from to

To be requested from

Funding period from to

Other, please specify

**8. Signatures** *Your signature as P.I., Co-investigator on this application verifies that the information herein is true and correct and that you are familiar with and will comply with standard of animal care and use established under the ethical guidelines and policies of the Mahidol University and Office of the National Research Council of Thailand (NRCT) and the Animal for Scientific Purpose Act., B.E. 2558*

**Principal investigator:** Date  **( )**

**Co- investigator:** Date  **( )**

**Co- investigator:** Date  **( )**

***The signature of Dean of Faculty / Head of Institute verifies that he / she acknowledges the fact that P.I. under this affiliation will conduct the animal care and use protocol, as provided herein.***

**Head of Faculty/Institute:** Date **( )**

**Faculty/Institute**

#### MAHIDOL UNIVERSITTY

#### RESEARCH PROTOCOL FORMAT

#### FOR PERMISSION OF ANIMAL CARE AND USE

**1. Non-technical summary**: *(Provide a brief, only one A4 page, and simplified description of the project that is easily understood by non-scientists, expressing its significance and needs for undertaking the study).*

**2. Rationale and literature review:** *(Include a brief statement of the requirement for the information being sought. Typically, the literature or the experience that led to the proposal will be briefly reviewed, references cited will be provided)*.

**3. Literature search for duplication:***(This search must be performed to prevent unnecessary duplication of previous experiments)****.***

**3.1 Database(s) searched** *(**Please specify the database name, e.g., PubMed, ScienceDirect)*:

**3.2 Date of literature search** (must be within six months prior to submission date*(dd/m/yy))*

**3.3 Range of years searched** *(To prevent the duplication of your proposed experiment, the minimum period of search should be more than 5 years)*

**3.4 Key words used in search:**

**3.5 Results of search:** Does the proposed research duplicate any previous work?

No  Yes, *explain why it is scientifically necessary to duplicate previous experiment.)*

**4. Objective(s):** *(Provide goal/specific aim of this project)*

**5. Experimental design**: *(Provide a complete description of what will be done to the animals. Succinctly outline the formal scientific plan and direction for experimentation, sequential description of procedures what will be done to the animals from obtain the animal to the end of study. A diagram or chart may be helpful to explain complex design)*.

**6. Data analysis and statistical method**: *(List the statistical test(s) planned or describe the strategy intended to evaluate the data).*

**7. Animal care and Source of samples or specimens:**

**7.1 Study location:** Where will the study take place?

**7.2 Will animals be observed?**

NO  YES, If yes, describe method of observation

**7.3 Will animals be captured?**

NO  YES

If yes, describe the capture and handling technique, including an estimate of how long the animals will remain in captivity and how you will minimize negative effect on the health of the animals.

**7.4 Will tissue be collected from the animals** (e.g., blood samples, scales, feathers, hair, fat or muscle tissue, etc.)?

NO  YES

If yes, describe the procedure and how discomfort will be minimized; include literature citations, when possible.

**7.5 Will the environment of the animals be altered in any way** (e.g. food or breeding/roosting sites manipulated, models of conspecifics presented, tape-recorded vocalizations broadcast, etc.)

NO  YES

If yes, describe and justify the manipulation.

**7.6 Source/Vendor:**

|  |  |  |  |
| --- | --- | --- | --- |
| From previously approved protocol | | | Protocol number (*please specify*): |
| Protocol Title (Thai) *please specify*: | | | |
| Protocol Title (English) *please specify*: | | | |
| Nature  (*Study on wildlife must be comply with the Wildlife Preservation and Protection Act B.E.2562(2019) and National Parks Act B.E.2562(2019)*, **Please attach the permission document**)  please specify: | | | |
| **Laboratory animals supply**  (With genetic quality and health certificates) | | please specify: | |
| Other | please specify: | | |

**7.7 Transportation of samples/specimen to the laboratory**, check all that apply

Transport in a closed container, specify

Duration of transportation

Transport in a temperature-controlled container, specify

Duration of transportation

Other, specify

Duration of transportation

**7.8 Provide estimation of sample size using statistical analysis or descriptive explanation for the number of samples to be used**

**7.9 Provide description of samples in Table below**

|  |  |  |  |
| --- | --- | --- | --- |
| **Animal** | **Genus and Species** | **Sample/Organ/Specimen** | **Number of samples will be used in this protocol** |
|  |  |  |  |
|  |  |  |  |

**8. Animal sample/specimen utilization and disposal:**

**8.1 Subsequent use of animal samples,** are any remaining animal samples used for other proposes?

**8.2 Animal tissue and carcasses disposal:** *Describe method used to dispose animal tissue and carcasses.*

**9. Occupational health and safety:**

**9.1 Select types of hazards associated with this protocol,** also provide name, source and amount to be used in each category

Cancer cell lines

Infectious agents *provide the certificate of biosafety approval*

Hazardous chemicals (e.g., carcinogen, mutagen and teratogen)

Radiation equipment and radioactive elements

Recombination agents

Other, specify

None

**9.2 Specify biosafety level:**  BSL-1  BSL-2  BSL-3

**9.3 Explain how the wastes associated with these hazards are decontaminated and disposed**

**9.4 Explain how the carcasses associated with these hazards are disposed**

**9.5 Explain any safety precautions and protective measures** (e.g., biosafety cabinet and proper PPE) to protect personnel from those hazards and list any surveillance procedures in place to monitor any potential exposure

**9.6 In case of accident, provide immediate procedures and early treatment to limit possible injury or illness**

**10. Qualification of personnel:**

*List all individuals who will be* ***directly*** *involved with the animals on this project. Include all investigators, students, post-doctoral researchers, staff research associates and laboratory assistants who will actually work with the animals. If personnel do not have experience, state how they will be trained:*

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Responsibilities** | **Direct involvement with animal samples (%)** | **Relevant experience and qualification**  **(e.g. How many years of experience working with animals or training related to the research)** |
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|  |  |  |  |

Principal investigator Date

( )