**中国科学院动物研究所**

**实验动物福利伦理审查表**

**Institute of Zoology Chinese Academy of Sciences**

**Application Format for Ethical Approval for Research Involving Animals**

**申请日期： 年 月 日 批准文号：**

**Appl.Date Y M D IACUC Issue No.**

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| --- | --- | --- | --- | --- | --- |
| **课题名称及编号**  **Program and No.** | | | | **课题来源**  **Sponsor** | |
| **课题负责人**  **Name of Principal Investigator** | | | | **科室**  **Department** | |
| **动物实验负责人**  **Contact Person** | | | | **电话和信箱**  **Contact Tel.No. and Email** | |
| **课题实施动物实验的人数**  **Number of Implement** | | | | **经专业培训的人数**  **Number of certificate** | |
| **参与动物实验操作人员姓名、相关专业证书编号，经验、培训、资质和能力的描述**  **Name and certificate number，Description of experience/training/competency of the individuals carrying out the research.** | | | | | |
| **动物实验设施许可证编号**  **Name and certificate number of the facility**  **SYXK（京）2021-0063** | | **特殊实验设施许可证编号**  **Name and certificate number of the facility** | | | |
| **现有动物实验设施条件是否与拟开展动物实验的规范性要求相匹配的描述**  **Conformity of facility condition and proposed to carry out experiment requirement** | | | | | |
| **拟实验时间： 年 月 日 至 年 月 日**  **Experimental period： Y M D to Y M D** | | | | | |
| **动物实验项目的目的、必要性、意义**  **Experimental objective，necessity and significance** | | | | | |
| **拟使用动物信息Animal to be used** | **动物来源(Animal origin)**  **许可证编号(Certificate number)** | | | | **质量合格证**  **(Certification of fitness)**  **□有**  **□无** |
| **品种/品系(breed/strain)：**  **□大鼠rat □小鼠 mice**  **□兔 rabbit□犬 dog**  **□灵长类 primary animal**  **□转基因动物 genetically modified animal**  **□其他（具体说明） others** | | | | **等级**  **□普通（CV）**  **□清洁（CL）**  **□SPF**  **□GF**  **□其他** |
| **数量只（♀；♂）**  **Number （♀；♂）** | | **体重 g**  **Weight g** | | **月龄 M**  **Age M** |
| **选择实验动物种类和数量的原因**  **Reasons of the choice of species and numbers of animals to be used.**  **1) 说明为什么必须使用动物，而不能用非动物替代品。**  **Justify why animals are required over non-animal alternatives:**  **2) 说明动物品种选择的原因。**  **Justify appropriateness of species selected:**  **3) 说明动物数量选择的标准。**  **Justify number of animals to be used:**  **4) 是否涉及重复实验。**  **Justify duplicative research: NA** | | | | |
| **拟开展动物实验的详细信息detailed information of the experiments on animals** | **实验设计和动物实验操作步骤 (Experimental Design and Animal Procedures)：**  **简要描述实验设计及动物实验内容。**提供的内容需使本研究所实验动物福利伦理委员会(以下简称“IACUC”)了解开始至结束动物实验的所有过程。内容中(根据具体情况)需包括的项目建议如下：  **-实验设计。**  **-实验组及对照组动物类别及数量。**  **-注射或接种（如感染性物质，佐剂等；注射剂量、部位、体积、给药途径及日程）。**  **-取血（体积、频率、部位和方法）。**  **-保定（固定动物）的方法（如保定椅，项圈，背心，锁链等）。描述采用的镇静、适应或训练的方法。**  **-其他（如存活实验，尾部活检等）。**  **-最终可能的结果，如疼痛紧张或腹水产生等。**  **-其他潜在的紧张因素（如限制食物或饮水，有害刺激、环境压力）和监控方法。**  **-当实验中使用肿瘤细胞、生物制剂、感染物、放射线或有毒化合物等可以引起明显的临床症状或潜在死亡，必须明确指出实验终点的标准，如肿瘤大小、体重增加或减少的百分比、无力摄食或饮水、行为异常、临床症状或毒性指征等。列出决定实施安乐死的标准。如果以死亡作为实验终点，必须以科学的判断作为依据。**  **-兽医护理（指出动物发生疾病时应采取的行动，如开始治疗，治疗前通知研究人员或实施安乐死）。** | | | | |
| **如进行存活手术，请完成下列选项：**  Ifsurvival surgery proposed, complete the following:  列举手术项目并简述手术步骤，包括所采用的消毒方法。若需要重复对同一动物进行多次手术请详细说明原因：  Identify and describe the surgical procedure(s) to be performed, include the aseptic methods to be utilized. Multiple surgical procedures on a single animal must be justified and outcomes evaluated. | | | | |
| **疼痛或紧迫反应的级别：**  **Pain or distress classification:**  （参考美国农业部USDA分类标准）  □USDA- C类-实施实验的动物没有疼痛、紧张或轻微或一过性的疼痛、紧张  USDA-Category C –Animals upon experiments will be conducted involving minimal, transient or no pain or distress.  □ USDA- D类-实验过程中有疼痛和紧张，但实施合适的麻醉、镇痛、镇静措施  USDA-Category D-Animals upon experiments will be conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs will be used.  □ USDA- E类-实验过程中有疼痛和紧张，但麻醉、镇痛、镇静的应用会影响实验结果 USDA-Category E- Animals upon experiments will be conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs will adversely affect the results. | | | | |
| **麻醉, 止痛, 镇静:**  Anesthesia, Analgesia, tranquilization  请指出对于相关动物使用所涉及的所有麻醉剂, 镇痛药, 镇静药或镇定剂，包括试剂名称,剂量, 给药方法和给药时间.  List all anesthetic, analgesic, or tranquilizing drugs, including agent name, dose, route and frequency. | | | | |
| **拟开展动物实验的详细信息detailed information of the experiments on animals** | **仁慈终点或实验终结的指标(Humane endpoint or experimental terminative indicator)**  **仁慈终点标准**  **□1.体重减轻：体重减轻达20-25％，或是动物出现恶病质或消耗性症候时。**  Weight loss: weight loss of 20-25%, or cachexia or wasting syndrome.  **□2.实体瘤的大小超过动物体重的10%。**  Solid tumors are more than 10 percent of an animal's body weight.  **□3.丧失食欲：小型啮齿类动物完全丧失食欲达24小时或食欲不佳（低于正常量之50％）达3天时。大动物完全丧失食欲达5天或食欲不佳（低于正常量之50％）达7天时。**  Loss of appetite: complete loss of appetite in small rodents for 24 hours or up to 3 days (50% less than normal).Large animals completely lost their appetite for 5 days or had poor appetite (less than 50% of the normal amount) for 7 days.  **□4.虚弱（无法进食或饮水）：动物在没有麻醉或镇静的状态下，无法进食或饮水，长达24小时无法站立或极度勉强才可站立时。**  Weakness (inability to eat or drink) when an animal is unable to eat or drink for up to 24 hours without anesthesia or sedation and is unable to stand or can stand only with extreme reluctance.  **□5.垂死/濒死：动物在没有麻醉或镇静的状态下，表现精神抑郁伴随体温过低（低于37℃）时。**  Dying: when an animal presents with depression accompanied by hypothermia (below 37℃) without anesthesia or sedation.  **□6.感染：在抗生素治疗无效并伴随动物全身性不适症状出现时。**  Infection: when antibiotic treatment fails and symptoms of systemic malaise develop in the animal  **□ a.器官：出现器官严重丧失功能的临床症状且治疗无效，或经动物中心兽医师判断预后不佳。**  Organs: clinical symptoms of severe organ loss and ineffective treatment, or poor prognosis as determined by animal center veterinarians.  **□ b.呼吸系统：呼吸困难、发绀大失血。**  Respiratory system: difficulty in breathing, cyanosis and massive blood loss.  **□c.心血管系统：大失血、已给予一次输液治疗后仍贫血（低于20％）。**  Cardiovascular system: large blood loss, anemia after one infusion (less than 20%)  **□ d.消化系统：严重呕吐或下痢，消化道阻塞，套迭，腹膜炎，内脏摘除手术。**  Digestive system: severe vomiting or dysentery, digestive tract obstruction, peritonitis, peritonitis, evisceration  **□e.神经系统：中枢神经抑制、震颤、瘫痪（其中任一肢或以上）、对止痛剂治疗无效之疼痛。**  Nervous system: central nervous suppression, tremor, paralysis, pain that is not treated with analgesics  **□f.肌肉骨骼系统：肌肉受损或骨折使肢体丧失功能。**  Musculoskeletal system: loss of limb function due to muscle damage or fracture.  **□g.皮肤：无法治愈之伤口、重复性自残或二级以上之保温垫烫伤。**  Skin: untreatable wounds, repetitive self-injury, or scald of thermal insulation pad above grade 2.  **或填写实验终结的指标（**Fill in the indicators of the end of the experiment**）** | | | | |
| **拟开展动物实验的详细信息detailed information of the experiments on animals** | **动物处死方法(Death conduct)**  **□**1.二氧化碳气体（推荐使用 Recommended）  **□**2.颈椎脱臼致死\* cervical vertebra dislocating  **□**3.麻醉后放血致死 Exsanguinating after anesthesia  **□**4.麻醉过量致死\*\* anesthetic overdose  **□**5.其他\*\*\*others  \*颈椎脱臼致死是不推荐的，假如执行颈椎脱臼致死，请说明科学必要性：  Cervical vertebra dislocating is not recommended, please indicate science necessity if performing.  \*\*请说明麻醉剂名称，使用剂量、频率以及给药途径：  Please list name, dose, frequency and rout of anesthetic agent:  \*\*\*请详细说明如下：Please describe in detail | | | | |
| **非处死动物的处置方式(Not for the death of the animal disposition)**  **□继续使用(continue to use)**  **□保存的机构(save in the agency)**  **□放生野外(release to the wild)**  **□其他(others)：**  **详细说明(detailed description)** | | | | |
| **危险物质Hazardous agents:**  危险物质包括下列几个范畴  Hazardous agents includes：  □1. 放射性同位素Radionuclides  □2. 致癌物/致突变物 Carcinogenic material  □3. 危险药品 Hazardous drugs  □4. 化学有害物Hazardous Chemicals  □5. 感染物质 Infectious Substance  □6. 其他有害物质 Other hazardous substance  **□本计划不使用任何危险物质 The study doesn’t involve any hazardous agents.**  **□本计划使用危险物质**（请详细描述具体的物质名称、毒性、拟使用剂量，以及给药或使用方式，并简述安全操作和及处理受污染动物及材料的方法及程序。）The study involves hazardous agents. (Identify all hazardous agents-name, toxicity, dose and route. Please describeprecautions and procedures.) | | | | |
| **生物材料/使用的动物产品 (如质粒、细胞系、组织或抗血清等)**  **Biological materials/Animal products (e.g. plasmid, cell line, tissue or antiserum,etc.):**  1. 名称(Name):  2. 来源(Source):□鼠(Rat) □兔(Rabbit) □人(Human)  □其他（Others)：  3. 其他需说明事项(Other items )： | | | | |
| **研究特殊要求或需求: Special concerns or requirements**  1.若由于特殊实验设备（或其他因素）而需要带实验动物活体出入实验动物设施，请详细说明原因。  If live animals must in/out laboratory animal facility, due to special equipment requirements(or other factors), please state the reasons.  2.请列出所需特殊专用笼具，及特殊动物照料（如需要禁食、禁水、特殊饲料及笼具、或废物处理等。）  List any special caging and animal care (e.g. food restriction, water restriction, special diet and caging, or waste disposal, etc.) | | | | |
| **利害分析的小结，说明为何预期的利益大于害处？**  **A summary of the harm-benefit analysis – why the expected benefits might be considered to outweigh the predicted harms？** | | | | | |
| **相关的补充说明或辅助证明文件**  **（Supplementary instruction or any auxiliary documents for investigate）** | | | | | |
| **信息公开和保密要求：说明哪些信息需要保密，哪些信息可以公开**  **Declaration for the information disclosure and confidentiality requirements，declaring the information need to be kept secret，the information can be disclosed.** | | | | | |
| **对伦理委员有无回避要求**  **Claiming jurors for being debarb.** | | | | | |
| **实验负责人（PI）的担保书**  **Principal Investigator Certifications and Acknowledgments:**  1. 我保证在此处提出的研究方案不是毫无意义的重复或已被报道过的研究。  I certify that I have determined that the research proposed herein is not unnecessarily  duplicative or previously reported research.  2. 我保证有权进行实验的人员已经过北京市的相关培训，并取得上岗证，且接受了生物学、操作、动物护理方面的训练及必要的无菌手术方法和技术。  I certify that the individuals have attended training in Beijing and gotthe certificate. Training may include but not be limited to the biology, handing, care of the species and necessary aseptic surgical techniques.  3．我保证有资质进行实验的人员将力求限制动物使用或将不良应激减少到最小，合理使用镇痛药、镇定剂和麻醉剂。对于本计划中涉及到的D类和E类疼痛级别的动物的实验方案，本人确信已查阅相关科学文献及数据，虽然该方法会引起一定的疼痛或紧张，没有发现可以替代的方法。本人确信将任何影响动物的非预期的实验结果告知本研究所实验动物福利伦理审查委员会(IACUC)。任何未预期的疼痛和紧张、疾病和死亡都会向主管兽医和IACUC报告。  I certify that the individuals listed in Section A will limit the use of animals or minimize distress, proper use of analgesics, sedative and anesthetics. For category D and E in proposals on pain, I certify that I have reviewed the pertinent scientific literature, and have found no alternatives to any procedures described herein which may cause more than a momentary pain or distress whether it is relieved or not. I certify that any unexpected experimental result will be reported to IACUC, and any unexpected pain, distress, illness and death will be reported to the attending veterinary and IACUC.  4. 我保证该研究方案会正确使用和处理危险试剂及生物材料。若用于实验的材料取自啮齿动物，则所有材料已经过特定检验（如MAP/RAP/HAP/PCR检测）。  I certify that the protocol will use and dispose hazardousagent or biological material correctly. All materials from rodent should be examined especially if any used.  5. 我保证实际实验操作与本实验方案相符，若该研究方案有重大变更（包括实验重大设计、人员变化、动物使用数量及实验进行时限等方面），事前一定获得本研究所实验动物福利伦理审查委员会(IACUC)的许可。  I will conduct this work with animals in accordance with the protocol as approved by IACUC. I will obtain approval from IACUC before initiating any changes (including experimental design, individual change, animal number and time covered) in the protocol.  6. 我保证遵守本研究所实验动物福利伦理审查委员会(IACUC)制定的各项规章制度，且熟知并遵守国家相关方面的法规法令。  I acknowledge responsibility of complying with the rules and regulations of IACUC, and related legislation.  **声明人：课题负责人（PI）签（章）**  **Declarant: Signature (stamp) of PI**  **动物实验负责人签（章）**  **Signature （stamp）of Director of animal experiment**  **年 月 日**  **Y M D** | | | | | |
| **主管兽医意见**  **Opinion of Veterinary of institution**  **□批准Approval□不批准Unapproved□建议改进Revise needed**  **不批准原因或建议改进意见如下Reasons for unapproved or revise suggestions：**  **主管兽医签（章）：**  **Signature（stamp）Veterinary**  **年 月 日**  **Y M D** | | | | | |
| **实验动物设施意见**  **Opinion from laboratory animal facility**  **□批准Approval□不批准Unapproved□建议改进Revise needed**  **不批准原因或建议改进意见如下Reasons for unapproved or revise suggestions：**  **设施负责人签（章）：**  **Signature（stamp）of the facility Director**  **年 月 日**  **Y M D** | | | | | |
| **福利伦理委员会审批意见**  **Approval opinion of committee**  **审查委员表决**  **Inspection by members：Agree（）；Disagree（）**  **主任委员签（章）：**  **Signature（stamp）of Chairman of committee**  **年 月 日**  **Y M D** | | | | | |
| **备注： □初审；□第 次审查。**  **Remarks: □first trial；□ reexamine No. .** | | | | | |

**申报说明：申报时，请提交本表一式两份及电子版。受理文号和批准文号由委员会填写。**

**Notice：Submitting the Application Format in duplicate and a electronic edition.**

**The Appl. No. and IACUC Issue No. are make out by Jury.**