

# 石河子大学医学院第一附属医院动物实验伦理审查表

## Animal Experimental Ethical Review Form of the First Affiliated Hospital of medical college, Shihezi University

(2012) 院伦审动实字 (11) 号 (No.)

申请人填写的相关信息 Related Information Filled by Applicant	文章名称 Project Title	茴香根皮提取物对四氯化碳小鼠诱导的肝纤维化的保护作用 Hepatoprotective Effect of Foeniculum vulgare Mill. root barks extract on Carbon Tetrachloride Induced-Hepatic Fibrosis in mice			
	项目来源与编号 Funding Source & Number	国家科技支撑计划 (项目编号: 1100507) National Science and technology support program of China (Project Number: 1100507)			
	课题负责人 Principal Investigator	王金辉 Jinhui Wang	科室 Department	药学院 School of pharmacy	
	职称 Professional Title	教授 professor	动物实验岗位证书编号 Animal User Permit No.		
	参与实验人员 Additional Personnel	姓名 Name	职称 Professional Title	动物实验岗位证书编号 Animal User Permit No.	
		张彩 Cai Zhang	学生 student		
	使用动物情况 Animal Requirements	动物实验设施许可证编号 Facility License No.	SCXK(xin)2011-0001		
		动物来源 Source of animal	新疆医科大学医学动物实验中心 Xinjiang Medicine University Medical Laboratory Animal Center		
		品种/品系 Species or Strains	昆明小鼠 Kunming mice	等级 Grade	SPF 级
规格 Specifications		20-22 g	数量 Number	♂ 200 只 ♀ 0 只 共 200 只	
计划进驻日期 Proposed Date of Commencement		2015 年 08 月 10 日 10, Aug, 2015	计划结束日期 Proposed Date of Completion	2015 年 10 月 10 日 10, Oct, 2015	
动物实验室主任意见 Director Attitude of Lab Animal Unit		同意 <input checked="" type="checkbox"/> Agree	不同意 <input type="checkbox"/> Disagree	签名(Signature): 年 月 日	
实验要点 (包括实验目的, 实验方法, 观测指标, 术前、术中、术后照护 (如镇痛), 确定人道终点, 实验结束后处死动物的方法等) Outline of experiments (including aim of experiment, experimental methods, observational index, peri-, intra- and post-operative care (e.g. analgesia) of animals, determination of humane endpoints, and executing animal method, et al)					
目标: 茴香根皮提取物对四氯化碳小鼠诱导的肝纤维化的保护作用 Aim: Hepatoprotective Effect of Foeniculum vulgare Mill. root barks extract on Carbon Tetrachloride Induced-Hepatic Fibrosis in mice 方法: 使用 CCl <sub>4</sub> 腹腔注射诱导小鼠肝纤维化的模型。 Methods: Hepatic fibrosis was induced in kunming mice by intraperitoneal injection(i.p.) of 0.1% carbon tetrachloride (CCl <sub>4</sub> ) and olive oil mixture 10ml/kg twice a week. After 4 weeks, mice were treated concurrently with the 70% ethanol extract of Foeniculum vulgare Mill. Root barks daily by oral gavage for 4 weeks to evaluate its protective effects.					

动物伦理审查表

<p>观察指标：谷丙转氨酶（ALT）、谷草转氨酶（AST）、甘油三酯（TG）、层粘连蛋白（LN）、透明质酸（HA）、丙二醛（MDA）、超氧化物歧化酶(SOD)和谷胱甘肽（GSH）的含量及 <math>\alpha</math>-SMA 与 MMP-9 的表达。</p> <p>Observational index: The levels of aspartate aminotransferase (AST), alanine aminotransferase (ALT), triglyceride(TG), laminin (LN), hexadecenoic acid (HA),malondialdehyde (MDA), superoxide dismutase (SOD) and glutathione (GSH). The expression of <math>\alpha</math>-SMA and MMP-9</p> <p>术前、术中、术后照顾：术前腹腔注射 4%水合氯醛进行麻醉</p> <p>Before the end of the experiment, the mice were anesthetized with 4% of the hydrate.</p>				
<p>申请者签名 Signature of Applicant</p>	<p>王金辉</p>	<p>联系电话 Telephone</p>	<p>办公室(O) 移动(M)</p>	<p>+8618699597631</p>
<p>申请者声明 Declaration of Principal Investigator</p>	<p>我将自觉遵守实验动物福利伦理原则，随时接受实验动物伦理委员会的监督与检查，如违反规定，自愿接受处罚。(I will abide by the rules of animal experimental ethics, accept the supervision and inspection of the animal experimental ethics committee, and accept the punishment if any infringement.)</p> <p style="text-align: right;">             签名(Signature): 王金辉              年 月 日         </p>			
<p>审查依据 Ethical Considerations</p>	<p>1. 该项目是否必须用实验动物进行实验，即能否用计算机模拟、细胞培养等非生命方法替代动物或用低等动物替代高等动物进行实验(Does laboratory animal must be used in the project? Could other methods such as computer simulation, cell culture or using the low-grade animal instead of the high-grade animal?)</p> <p>2. 表中所填申请人资格和所用动物的品种品系、质量等级、规格是否合适，能否通过改良设计方案或用高质量的动物来减少所用动物的数量(Are the qualification of applicant, species or strain, grade and specifications of animals suitable? Could the quantity of animals be reduced by improving the study design or using high quality animals?)</p> <p>3. 能否通过改进实验方法、调整实验观测指标、给予必要的术后照护（如镇痛）、改良处死动物的方法，来优化实验方案、善待动物(Could the study design and animal treatment be refined by ameliorating experimental method, adjusting observational index, providing necessary post-operative care (e.g. analgesia), or executing animal method?)</p>			
<p>医学伦理委员会意见 MEC</p>	<p>同意 Agree <input checked="" type="checkbox"/></p>	<p>不同意 Disagree <input type="checkbox"/></p>	<p>伦理委员会主任/授权者签字 Chair of Medical Ethics Committee</p> <p style="text-align: center;">               签章(Stamp)              年 月 日         </p>	
<p>备注 Remark</p>				

说明：

1. 请用电脑打印(签名处除外)；双面打印。
2. 关于实验要点，可另附详细材料说明（如实验步骤、技术路线等）。
3. 需随本表递交自然科学基金申报书。
4. 动物实验岗位证书编号没有可先不填。