

# 中国畜牧兽医

7

2013

ZHONGGUO XUMU SHOUYI

CHINA ANIMAL HUSBANDRY & VETERINARY MEDICINE

第40卷 第7期

Vol. 40 No.7

华派  
HUAPAI

精华集团·华派生物

## 蓝经灵

猪繁殖与呼吸综合征病毒活疫苗  
(经典蓝耳株 CH-1R)

兽药生字(2011)221011063  
国兽药广审(文)2011100112



- 疫苗纯净
- 安全不返强
- 品质稳定
- 免疫长保护

四川省华派生物制药有限公司

Sichuan Huapai Bio-pharmaceutical Co., LTD

地址：四川省简阳市工业集中区（石桥） 邮编：641401

电话：028—27400432 27282289 传真：028—27282488

ISSN 1671-7236



07>

主管：中华人民共和国农业部

主办：中国农业科学院北京畜牧兽医研究所

9 771671 723130

# 中国畜牧兽医

ZHONGGUO XUMU SHOUYI

第40卷 第7期 2013年7月

## 目 次

### · 生 物 技 术 ·

- 不同浓度胰岛素样生长因子-I 对体外培养奶牛乳腺上皮细胞乳蛋白和脂肪合成相关基因表达的影响 ..... 王皓宇, 秦彤, 郝海生, 等(1)
- 表面展示猪圆环病毒 2 型衣壳蛋白的重组杆状病毒的构建与鉴定 ..... 靳立明, 张春雷, 廖明, 等(6)
- ENO1 过表达对籽鹅卵泡颗粒细胞凋亡基因 *Bcl-2* 表达的影响 ..... 王江璐, 计红, 张伟宏, 等(10)
- 荷斯坦牛二酰基甘油酰基转移酶 1 基因外显子 8 的单核苷酸多态性位点对蛋白质结构和功能的影响及其进化分析 ..... 刘贤慧, 常玲玲, 吴正常, 等(14)
- Q 热贝纳柯克斯体 SYBR Green I 荧光定量 PCR 检测方法的建立 ..... 贾广乐, 王晓楠, 廖娟红, 等(18)
- 猪链球菌 2 型分解代谢控制蛋白 A 经 NF- $\kappa$ B/MAPK 通路对巨噬细胞 RAW264.7 影响的研究 ..... 郎需龙, 冉会玲, 王秀然, 等(21)
- 羊口疮病毒感染对巨噬细胞 RAW264.7 凋亡的影响 ..... 于永忠, 柳婧, 孙虎男, 等(25)
- 射干地龙颗粒的含量测定及制剂稳定性研究 ..... 辛蕊华, 谢家声, 郑继方, 等(29)
- 多肽 PrP106-126 对小脑颗粒神经元凋亡相关基因表达的影响 ..... 童双, 吴新涛, 黄志强, 等(34)
- 一株猪 II 型圆环病毒的分离鉴定及基因组序列分析 ..... 杨国良, 孙丰廷, 郑杰, 等(38)
- 快速鉴定猪链球菌和马链球菌兽疫亚种双重 PCR 方法的建立 ..... 李书光, 李天芝, 李峰, 等(43)
- 大肠杆菌对仔兔小肠黏膜免疫相关细胞的影响 ..... 刘莲莲, 张应龙, 杨海莹, 等(46)
- 猪繁殖与呼吸综合征病毒重组 M 蛋白间接 ELISA 抗体检测方法的建立及应用 ..... 吴忆春(51)
- 副猪嗜血杆菌 *tbpB* 基因的 PCR-RFLP 分型 ..... 李淑芳, 龚玉梅, 侯娜, 等(56)
- 疑似草鱼嗜水气单胞菌的分离鉴定及药敏试验 ..... 陆英杰, 杜玉东, 王志彪, 等(62)
- 产肠毒素大肠杆菌双重 PCR 检测方法的建立 ..... 曲泽慧, 陈佩佩, 张爱芹, 等(65)
- 免病毒性出血症病毒重组蛋白 VP60 间接 ELISA 抗体检测方法的建立与应用 ..... 李云琴, 赵美盈, 刁富花(69)
- 一株 H3 亚型野鸟源禽流感病毒血凝素基因序列分析 ..... 冉隆仲, 李涛, 马萍, 等(73)
- 猪繁殖与呼吸综合征病毒细胞受体研究进展 ..... 李红, 周恩民, 易建中(77)
- 猪附红细胞体分子生物学研究进展 ..... 唐丽, 李晓云, 贾杏林(81)
- 高分辨率熔解曲线分析法检测牦牛脂蛋白脂酶外显子 7 的多态性及与生长性状相关性分析 ..... 扎西卓玛, 郭宪, 阎萍, 等(84)

### · 动物营养与饲料科学 ·

- 长期饲喂亚麻籽对蛋鸡生产性能及消化代谢的影响 ..... 陈勇, 甄莉, 杨焕民(89)
- 日粮蛋白质水平对海南猪生产性能和血液生化指标的影响 ..... 郑心力, 孙瑞萍, 魏立民, 等(93)
- 不同结构性开食料对犊牛生长性能的影响 ..... 郭春燕, 孙世民, 杨继生, 等(96)
- 肉品质评定指标及影响因素的研究进展 ..... 谷英, 孙海洲, 桑丹, 等(100)

## · 生 理 生 化 ·

- 小鼠髓源未成熟树突状细胞的分离与培养 ..... 廖娟红, 林祥梅, 贾广乐(107)  
移植骨髓间充质干细胞对乳腺炎模型大鼠血清中酶及抗体水平的影响 ..... 秦小惠, 古再丽努尔·艾麦提, 邵伟, 等(112)  
不同剂量链脲佐菌素及不同性别大鼠糖性白内障模型的比较研究 ..... 李婧, 田海燕, 杨菲, 等(116)  
蝇蛆抗菌肽的诱导及其抗菌性能研究 ..... 周钢, 申红, 王俊刚, 等(120)  
两种纯化兔抗酸性红 73 免疫球蛋白 G 方法的比较研究 ..... 常向彩, 杨晓农, 朱子凤, 等(124)

## · 遗 传 饲 育 ·

- 山羊腺苷单磷酸脱氨酶 1 基因启动子区单核苷酸多态性研究 ..... 王德凤, 杨永强, 韩勇(127)  
3 个山羊品种角蛋白 7 基因的遗传多态性分析 ..... 彭艺艺, 杨朝霞, 耿荣庆, 等(133)  
遗传背景和胎儿日龄对猪类胚胎生殖细胞培养的影响 ..... 董晓, 冯书堂, 王红军(137)  
大河乌猪磷酸酯转移蛋白基因内含子 4 的 SNPs 检测及其与生产性能的关联分析 ..... 李福泉, 杨文, 郭斌, 等(143)  
细毛羊毛囊干细胞分离培养方法比较研究 ..... 郭婷婷, 张世栋, 牛春娥, 等(148)  
动物精液质量检测方法研究进展 ..... 乔利敏(153)

## · 疾 病 防 治 ·

- 内蒙古地区绵羊肺炎支原体的分离鉴定及序列分析 ..... 张玲, 郝永清, 黄海碧, 等(158)  
细菌耐药性研究进展 ..... 高璐琰, 杨钟, 武瑞兵, 等(162)  
肉鸡沙门氏菌的分离鉴定及药敏试验 ..... 王傲雪, 张凌云, 张桉潮, 等(167)  
口蹄疫疫苗研究进展 ..... 张元沛, 李彦芹, 王玲玲, 等(171)  
犊牛呼吸道合胞体病毒和巴氏杆菌混合感染的调查研究 ..... 郭芝梅, 赵文信(175)  
山羊痘病毒 NM 株的分离鉴定 ..... 切环(179)

## · 经 验 交 流 ·

- 几株高产蛋白酶菌株的分离鉴定及初步研究 ..... 朱绍辉, 王斌, 夏伟, 等(182)  
牛异食癖的病因分析及防治对策 ..... 韩天龙, 王敏, 赵瑞霞, 等(186)  
华北驼绒藜替代不同比例粗饲料对苏尼特羊增重及经济效益的影响 ..... 王晓光, 吴江鸿, 刘亚红, 等(189)  
缠丝鸭蛋品质及营养成分测定 ..... 韩鹏, 徐廷生, 雷雪芹, 等(192)  
抗菌肽 PG 的研究进展 ..... 晏家友, 张纯, 唐凌, 等(195)  
一种基于奶牛反刍时间的发情鉴定新技术 ..... 冯涛, 郭勇, 白佳桦, 等(198)

## · 国 外 牧 科 技 ·

- 饲喂可消化性的不同大豆油对杂交小母牛瘤胃消化性能、发酵参数及微生物的影响 ..... (61)  
短期限制饲喂的泌乳期奶牛乳腺上皮细胞乳蛋白合成通路基因表达的研究 ..... (72)  
日粮添加钴和注射维生素 B<sub>12</sub>对荷斯坦奶牛泌乳性能和新陈代谢的影响 ..... (115)  
过瘤胃 B 族维生素对泌乳奶牛产奶量和乳成分含量的影响 ..... (142)  
日粮粗饲料类型对泌乳早期奶牛瘤胃微生物蛋白合成和乳成分的影响 ..... (174)  
1 型和 2 型猪繁殖与呼吸综合征病毒对浆细胞样树突状细胞中 α 干扰素反应的影响 ..... (178)

# CHINA ANIMAL HUSBANDRY & VETERINARY MEDICINE

Vol. 40 No. 7 (Jul. 2013)

## SELECTED CONTENTS

- Effects of different concentration insulin-like growth factor- I on expression of the related genes of milk protein and fat synthesis in bovine mammary epithelial cells cultured *in vitro* ..... WANG Hao-yu, QIN Tong, HAO Hai-sheng, et al(1)
- Construction and identification of recombinant baculovirus surface displaying the cap protein of porcine circovirus type 2 ..... JIN Li-ming, ZHANG Chun-lei, LIAO Ming, et al(6)
- Effects of ENO1 overexpression with adenovirus vector on Bcl-2 in the granulose cell of Zi goose ..... WANG Jiang-lu, JI Hong, ZHANG Wei-hong, et al(10)
- Effect of Holstein cows diacylglycerol acyltransferase 1 gene in exon 8 on the protein structure and function of single nucleotide polymorphism and its relationship with its evolution analysis ..... LIU Xian-hui, CHANG Ling-ling, WU Zheng-chang, et al(14)
- Establishment of SYBR Green I fluorescent quantitative PCR detection method for Q fever *Coxiella burnetii* ..... JIA Guang-le, WANG Xiao-nan, LIAO Juan-hong, et al(18)
- Research on the effects of ccpA of *Streptococcus suis* type 2 in RAW264.7 macrophages through NF-κB/MAPK pathway ..... LANG Xu-long, RAN Hui-ling, WANG Xiu-ran, et al(21)
- The influence on apoptosis of macrophage RAW264.7 during ORFV infection ..... YU Yong-zhong, LIU Jing, SUN Hu-nan, et al(25)
- Determination of Shegan Dilong granules by RP-HPLC and the study of its stability ..... XIN Rui-hua, XIE Jia-sheng, ZHENG Ji-fang, et al(29)
- Effects of peptides PrP106-126 on cerebellar granule neuron apoptosis-related genes expression ..... TONG Shuang, WU Xin-tao, HUANG Zhi-qiang, et al(34)
- Isolation, identification and genome sequence analysis of porcine circovirus type II isolate ..... YANG Guo-liang, SUN Feng-ting, ZHENG Jie, et al(38)
- Establishment of double PCR for rapid identification of *Streptococcus suis* and *Streptococcus equi* subspecies ..... LI Shu-guang, LI Tian-zhi, LI Feng, et al(43)
- Effect of *E. coli* on intestinal mucosal immunity-associated cells of rabbits ..... LIU Lian-lian, ZHANG Ying-long, YANG Hai-ying, et al(46)
- Establishment and application of an indirect ELISA with recombinant M protein of porcine reproductive and respiratory syndrome virus ..... WU Yi-chun(51)
- Typing of *Haemophilus parasuis* strains *tbpB* gene by PCR-RFLP analysis ..... LI Shu-fang, GONG Yu-mei, HOU Na, et al(56)

- Identification and drug sensitive test of suspected grass carp *Aeromonas hydrophila*  
..... LU Ying-jie, DU Yu-dong, WANG Zhi-biao, et al(62)
- Double PCR for detection of virulence genes *K88* and *K99* of enterotoxigenic  
*Escherichia coli* strains ..... QU Ze-hui, CHEN Pei-pei, ZHANG Ai-qin, et al(65)
- Development and application of an indirect ELISA for detecting antibodies to rabbit  
hemorrhagic disease virus using recombinant truncated VP60 protein  
..... LI Yun-qin, ZHAO Mei-ying, DIAO Fu-hua(69)
- Sequence analysis of *HA* gene of wild bird-origin H3 subtype avian influenza virus  
..... RAN Long-zhong, LI Tao, MA Ping, et al(73)
- Research progress on cellular receptors of porcine reproductive and respiratory  
syndrome virus ..... LI Hong, ZHOU En-min, YI Jian-zhong(77)
- Research progress on the molecular biology of *Mycoplasma suis*  
..... TANG Li, LI Xiao-yun, JIA Xing-lin(81)
- Correlation analysis of high-resolution melting curve for detecting the lipoprotein lipase-Exon7  
polymorphism and growth traits in yak ..... ZHAXI Zhuo-ma, GUO Xian, YAN Ping, et al(84)
- Long-term effect of feeding flaxseed on the production performance and metabolism  
of laying hens ..... CHEN Yong, ZHEN Li, YANG Huan-min(89)
- Effect of the level of protein in dietary on growth performance and blood biochemical  
indices in Hainan pigs ..... ZHENG Xin-li, SUN Rui-ping, WEI Li-min, et al(93)
- Effects of different structural starters on growth performance in calf  
..... GUO Chun-yan, SUN Shi-min, YANG Ji-sheng, et al(96)
- Research progress on evaluation indices and influencing factors of meat quality  
..... GU Ying, SUN Hai-zhou, SANG Dan, et al(100)
- Isolation and culture of mouse bone marrow-derived dendritic cells  
..... LIAO Juan-hong, LIN Xiang-mei, JIA Guang-le(107)
- The study on enzyme and antibody level in serum of mastitis model rats after injecting  
bone marrow mesenchymal stem cells ..... QIN Xiao-hui, Guzailinuer-Aimaiti, SHAO Wei, et al(112)
- Comparative study of different doses of streptozocin and different genders in establishing  
diabetic cataract models of rats ..... LI Jing, TIAN Hai-yan, YANG Fei, et al(116)
- Study on induction of maggot antimicrobial peptides and its antibacterial property  
..... ZHOU Gang, SHEN Hong, WANG Jun-gang, et al(120)
- Comparison of two methods for purifying the rabbit antibody of acid red 73 IgG  
..... CHANG Xiang-cai, YANG Xiao-nong, ZHU Zi-feng, et al(124)

- Study on the SNPs of *AMPD1* gene promoter region in goat ..... WANG De-feng, YANG Yong-qiang, HAN Yong(127)
- Genetic polymorphism analysis of *KAP7* gene in 3 goat breeds ..... PENG Yi-ji, YANG Zhao-xia, GENG Rong-qing, et al(133)
- The effect on the culturing of porcine embryonic germ cells by genetic background and fetal stage ..... DONG Xiao, FENG Shu-tang, WANG Hong-jun(137)
- SNPs detection of PLTP-4 among dahe blank porcine and association analysis with their production performance ..... LI Fu-quan, YANG Wen, GUO Bin, et al(144)
- Comparative study on isolation and culture methods of hair follicle stem cells in fine-wool sheep ..... GUO Ting-ting, ZHANG Shi-dong, NIU Chun-e, et al(148)
- Research progress on the methods for sperm quality evaluation in animal ..... QIAO Li-min(153)
- Isolation, identification and sequence analysis of *Mycoplasma ovipneumoniae* in Inner Mongolia ..... ZHANG Ling, HAO Yong-qing, HUANG Hai-bi, et al(158)
- Research progress on bacterial antimicrobial resistance ..... GAO Lu-yan, YANG Zhong, WU Rui-bing, et al(163)
- Isolation, identification and drug sensitive assay of *Salmonella* from broiler ..... WANG Ao-xue, ZHANG Ling-yun, ZHANG An-chao, et al(167)
- Research progress on foot-and-mouth disease vaccine ..... ZHANG Yuan-pei, LI Yan-qin, WANG Ling-ling, et al(171)
- Investigation on the mixed infection of bovine respiratory syncytial virus and *Pasteurella multocida* from calves ..... QI Zhi-mei, ZHAO Wen-xin(175)
- Isolation and identification of goat pox viruses NM strain by PCR ..... QIE Huan(179)
- Isolation, identification and preliminary study of several high protease-producing strains ..... ZHU Shao-hui, WANG Bin, XIA Wei, et al(182)
- Causes analysis and prevention and treatment countermeasures of cattle pica allotriphagia disease ..... HAN Tian-long, WANG Min, ZHAO Rui-xia, et al(186)
- The effect of replacing for different proportions of roughage with *Ceratocercus arborescens* on the Sunite sheep weight gain and economic benefits ..... WANG Xiao-guang, WU Jiang-hong, LIU Ya-hong, et al(189)
- Determination on nutrient components and quality of Chansi duck eggs ..... HAN Peng, XU Ting-sheng, LEI Xue-qin, et al(192)
- Research progress on antibacterial peptide protegrin ..... YAN Jia-you, ZHANG Chun, TANG Ling, et al(195)
- A new method of heat detection based on rumination time in dairy cattle ..... FENG Tao, GUO Yong, BAI Jia-hua, et al(198)