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药学学报

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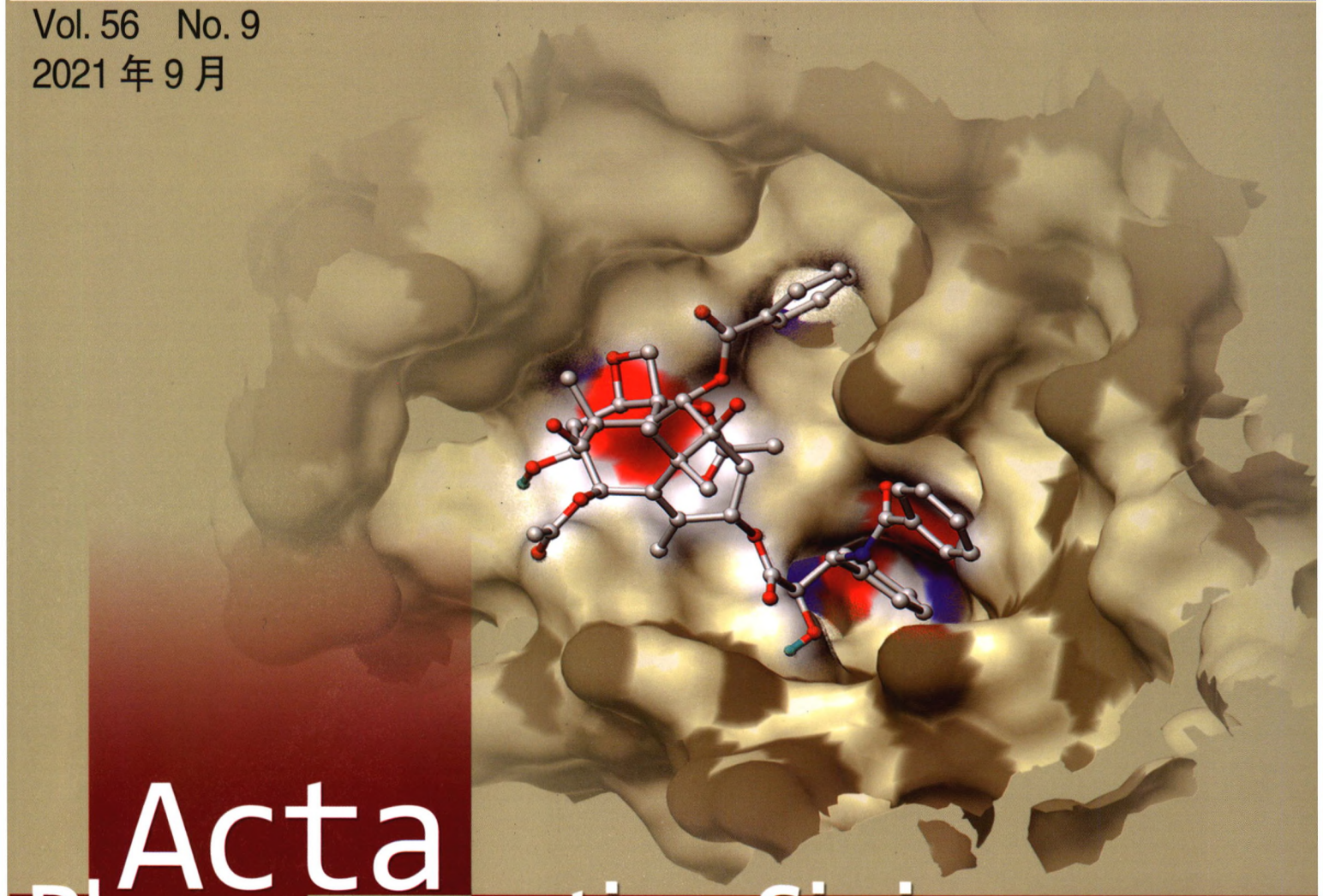

Acta Pharmaceutica Sinica

专题报道

李梦林, 张金兰等
基于N-聚糖和完整糖肽的单克隆抗体药物糖基化修饰表征

专家论坛

李 川等
中药多成分药代动力学: 发现与中药安全性和有效性关联的物质并揭示其药代特征

中国药学会
中国医学科学院药物研究所

药 学 学 报

第 56 卷　第 9 期　2021 年 9 月

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专题报道：药物生物分析

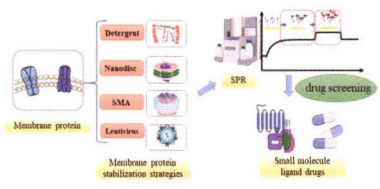
2325

膜蛋白稳定技术及其在药物筛选中的应用进展

方家豪，曹雨虹，何宇臻，洪战英*，柴逸峰

(海军军医大学药学院，上海　200433)

综述了目前用于稳定分离纯化 MPs 技术的研究进展，包括洗涤剂、人造膜、聚合物、慢病毒颗粒等四种策略，及其结合表面等离子共振技术在药物筛选中的应用。



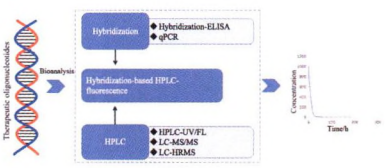
2335

核酸药物生物分析方法研究进展

程忠哲[1]，姜宏梁[2*]

(1. 潍坊医学院药学院，山东　潍坊　261053；　2. 华中科技大学同济医学院药学院，湖北　武汉　430030)

核酸药物的生物分析技术方法。



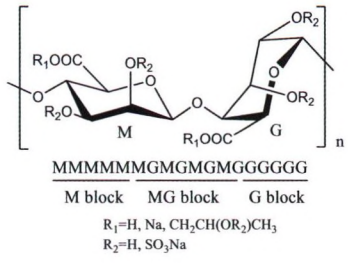
2346

高效阴离子交换-脉冲安培法分析藻酸双酯钠的单糖组成和比例

王悦[1,2]，陈欣桐[1,2]，李振华[1]，宋玉娟[1,2]，范慧红[1,2*]

(1. 中国食品药品检定研究院，北京　102629；　2. 化学药品质量研究与评价重点实验室，北京　102629)

本文建立了高效阴离子交换-脉冲安培法分析类肝素药物藻酸双酯钠的单糖组成和单糖比例。通过正交分析的方法确定了样品前处理最佳反应条件，该方法能够准确测定藻酸双酯钠单糖组成，为藻酸双酯钠的结构鉴定提供单糖信息。



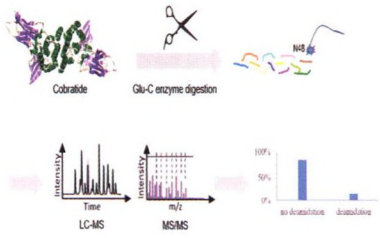
2352

基于质谱分析技术的科博肽中脱酰胺杂质测定方法研究

黄露[1,2#]，刘博[1,2#]，范慧红[1,2*]

(1. 中国食品药品检定研究院，北京　102629；　2. 国家药品监督管理局化学药品质量研究与评价重点实验室，北京　102629)

建立基于 Glu-C 酶的 bottom-up 分析方法，定性与定量分析科博肽的脱酰胺杂质，显著降低了酶切过程造成的人为引入的脱酰胺杂质的现象比例。



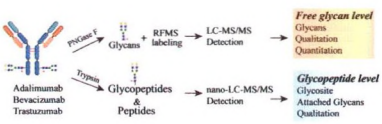
2360

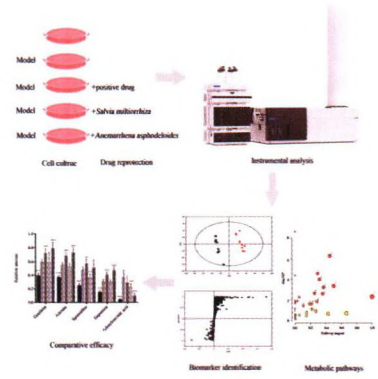
基于 N-聚糖和完整糖肽的单克隆抗体药物糖基化修饰表征

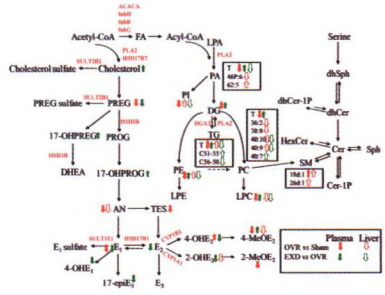
李梦林#，朱文文#，张金兰*

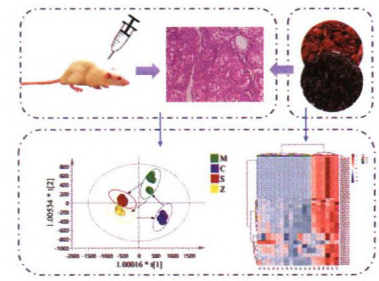
(中国医学科学院、北京协和医学院药物研究所，天然药物活性物质与功能国家重点实验室，北京　100050)

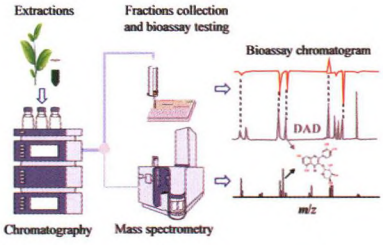
本研究基于液质联用技术，在游离 N-聚糖和完整糖肽层次建立了单克隆抗体药物的糖基化修饰表征方法。该方法可鉴定单抗药中低丰度糖型，并可对样品糖基化修饰的批间差异进行分析。



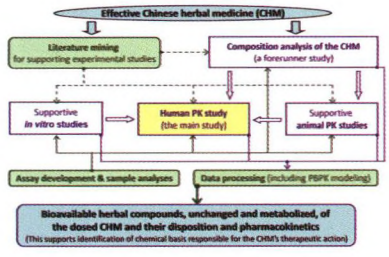






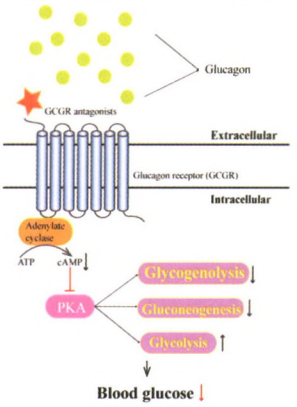


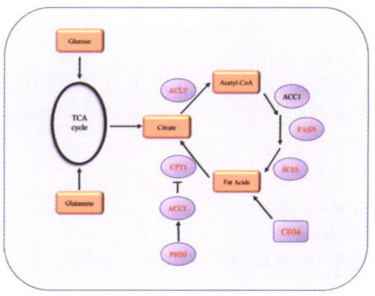
专家论坛

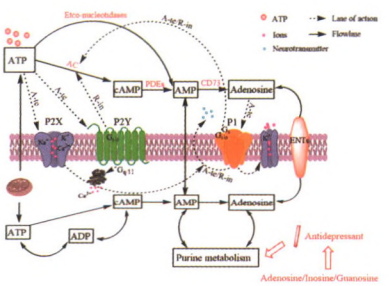


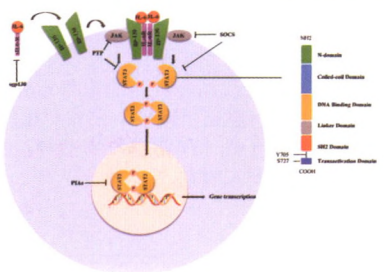
万方数据

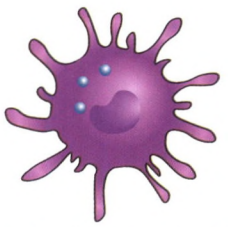
综述

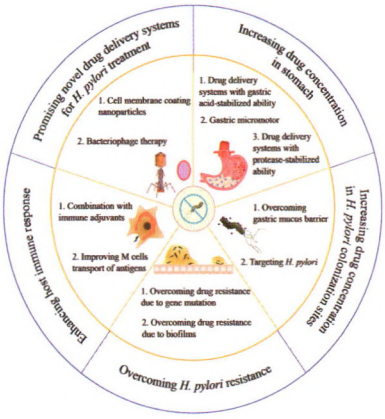


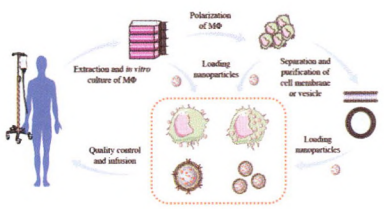


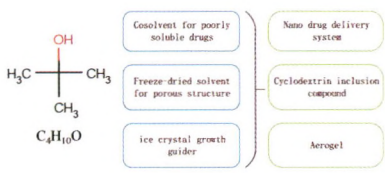


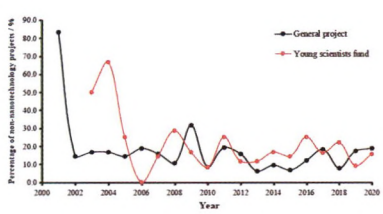



Dendritic cell-based vaccine delivery

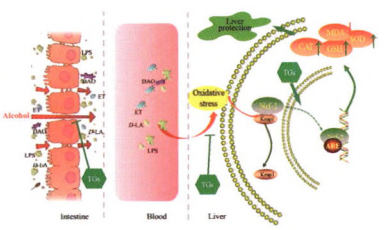


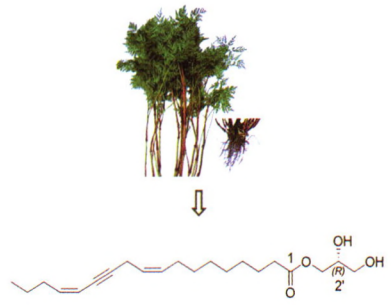




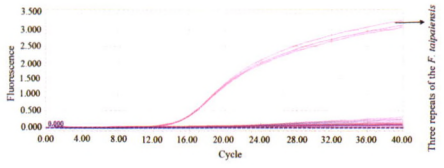


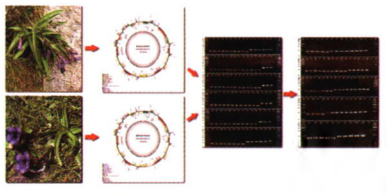
研究论文





14,15-dehydrocrepenynic acid monoglyceride (1)





新药发现与研究实例简析

ACTA PHARMACEUTICA SINICA

Volume 56 Number 9 2021 September

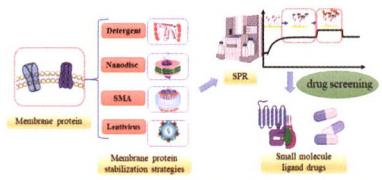
Graphical Abstracts

Special Reports: Bioanalysis for Drug

2325

Advancements in stabilization technologies for membrane protein and its application in drug screening

FANG Jia-hao, CAO Yu-hong, HE Yu-zhen, HONG Zhan-ying*, CHAI Yi-feng
(School of Pharmacy, Naval Medical University, Shanghai 200433, China)

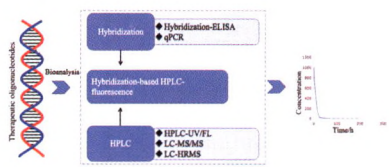


This paper reviews the current research progress of membrane protein stabilization, including detergent, artificial membrane, polymer, lentiviral particles and their application in drug screening combined with surface plasmon resonance.

2335

Advances in the bioanalysis of therapeutic oligonucleotides

CHENG Zhong-zhe[1], JIANG Hong-liang[2*]
(1. School of Pharmacy, Weifang Medical University, Weifang 261053, China; 2. School of Pharmacy, Tongji Medical College, Huazhong University of Science and Technology, Wuhan 430030, China)

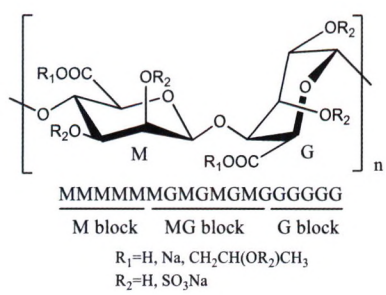


Bioanalysis of therapeutic oligonucleotides.

2346

Analysis of monosaccharide composition and monosaccharide ratio in propylene glycol alginate sodium sulphate drugs by high performance anion exchange chromatograghy -pulsed amperometric detection

WANG Yue[1,2], CHEN Xin-tong[1,2], LI Zhen-hua[1], SONG Yu-juan[1,2], FAN Hui-hong[1,2*]
(1. National Institute for Food and Drug Control, Beijing 102629, China; 2. NMPA Key Laboratory for Quality Research and Evaluation of Chemical Drugs, Beijing 102629, China)

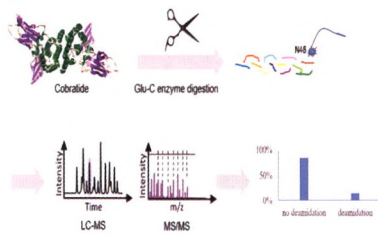


In this study, a high efficiency anion exchange-pulsed amperometric method was established for the determination of monosaccharide composition and monosaccharide ratio of propylene glycol alginate sodium sulphate (PSS) drugs. The reaction conditions for sample pretreatment were optimized *via* orthogonal analysis. The monosaccharide composition of PSS from different manusfacture can be accurately determined with great significance for the structural identification of PSS.

2352

Determination method of deamidation impurities in cobratide using mass spectrometry technique

HUANG Lu[1,2#], LIU Bo[1,2#], FAN Hui-hong[1,2*]
(1. National Institutes for Food and Drug Control, Beijing 102629, China; 2. NMPA Key Laboratory for Quality Research and Evaluation of Chemical Drugs, Beijing 102629, China)



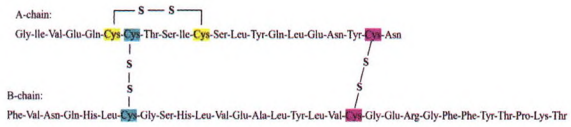
Establish a bottom-up analysis method based on Glu-C enzyme to qualitatively and quantitatively analyze the deamidation impurity of cobratide, which significantly reduced the proportion of deamidation impurities introduced during the digestion process.

2389

Development of a fast and sensitive method for direct analysis of insulin aspart in human plasma

HAN Ying[1], WEI Guo-lan[1], MI Nan[1], GUO Lin-feng[2], HU Chun-yun[2], LI Shuang[3], BI Lü-cun[1*]

(1. Labcorp Pharmaceutical Research and Development (Shanghai) Co., Ltd., Shanghai 201203, China; 2. HEC Pharma Co., Ltd., Dongguan 523000, China; 3. HEC Pharma Co., Ltd., Yichang 443000, China)



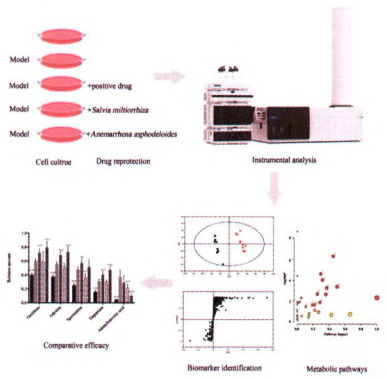
A fast, sensitive, simple and high throughput UPLC-MS/MS method was established for the direct quantification of insulin aspart in human plasma. And the method was successfully applied in supporting the pharmacokinetic research of two insulin aspart injections (Test Product and NovoRapid®) in heathy male subjects.

2394

Comparative study on the protective effect of *Salvia miltiorrhiza* and *Anemarrhena asphodeloides* on AD cell model using UHPLC-QTOF/MS based cell metabolomics

WANG Hui[1#], CAI Ying[1,2#], LIU Min[3], HONG Zhan-ying[1,2*], CHAI Yi-feng[1]

(1. School of Pharmacy, Naval Medical University, Shanghai 200433, China; 2. School of Pharmacy, Fujian University of Traditional Chinese Medicine, Fuzhou 350122, China; 3. Department of Pharmacy, Changhai Hospital, Naval Military Medical University, Shanghai 200433, China)



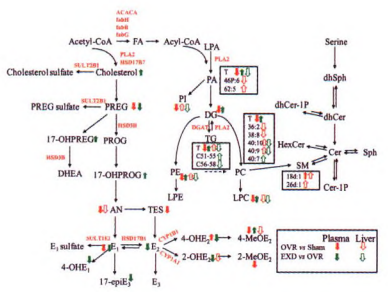
The protective effect of *Salvia miltiorrhiza* and *Anemarrhena asphodeloides* on AD cell model was compared based on UHPLC-QTOF/MS by cell metabolomics platform. The results showed that the extracts of *Salvia miltiorrhiza* and *Anemarrhena asphodeloides* had certain protective effects on the AD cell model with Tau protein abnormal phosphorylation, but *Salvia miltiorrhiza* had more extensive targets and could significantly improve the cell viability.

2403

The mechanism of Er-xian Decoction in regulating lipid metabolism disorders on bilateral ovariectomized rats based on metabolomics study

SHENG Ning[#], WANG Cai-hong[#], JIA Zhi-xin, WANG Zhe, WU Cai-sheng[*], ZHANG Jin-lan[*]

(State Key Laboratory of Bioactive Substances and Functions of Natural Medicines, Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing 100050, China)



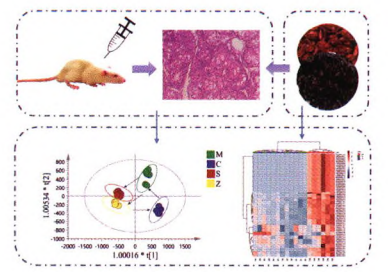
In this study, metabolomics was used to simulate the physiological state of menopausal women with bilateral ovariectomized model rats to explore the metabolism characteristics of different menopausal stages and the possible metabolic pathways and mechanisms of Er-xian Decoction to regulate menopausal metabolic disorders.

2410

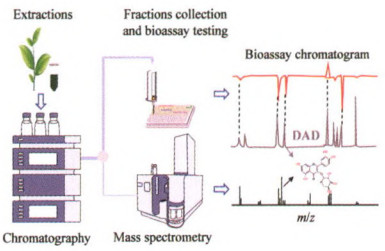
Mechanism investigation on the enhanced anti-hepatic fibrosis effects in rats of Fructus Corni after wine-processing based on plasma metabonomics

NIU Min-jie[1,2], WANG Meng-qing[1,2], YU Hui[1,2], LIU Xin[1,2], CAI Hao[1,2*], CAO Gang[3], DUAN Yu[1,2], PEI Ke[4], ZHANG Zhuan[1]

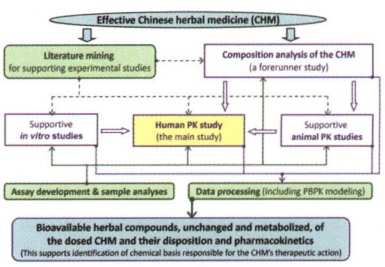
(1. School of Pharmacy, Nanjing University of Chinese Medicine, Nanjing 210023, China; 2. Engineering Center of State Ministry of Education for Standardization of Chinese Medicine Processing, Nanjing University of Chinese Medicine, Nanjing 210023, China; 3. School of Pharmacy, Zhejiang Chinese Medical University, Hangzhou 310053, China; 4. School of Chinese Medicine and Food Engineering, Shanxi University of Chinese Medicine, Jinzhong 030619, China)



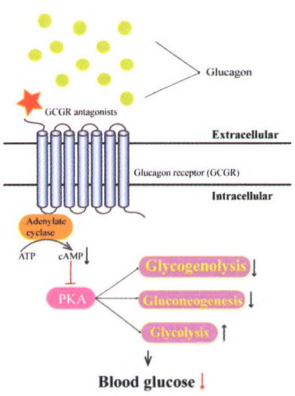
The wine-processed Fructus corni has better effects on regulating glycerol phospholipid metabolism, retinol metabolism, and arachidonic acid metabolism, and shows better anti-hepatic fibrosis effect than that of the crude one.

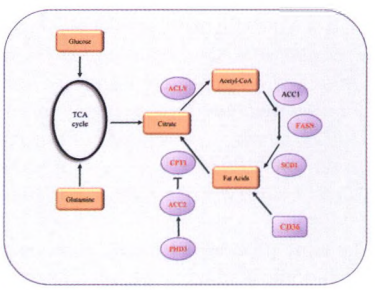


Professionals Forum

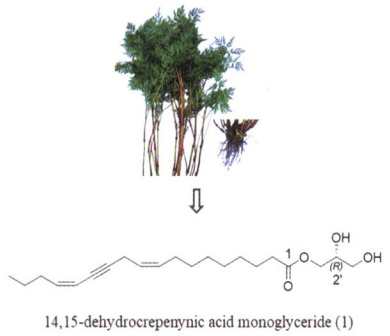


Reviews

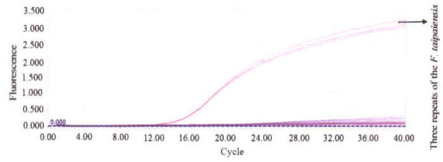


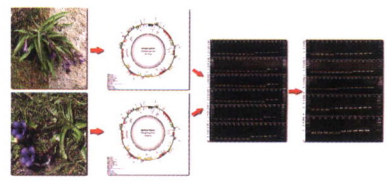


Original Articles



14,15-dehydrocrepenynic acid monoglyceride (1)





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