Supporting Information

Anti-Hyperuricemic and Nephroprotective Effects of Rhein in Hyperuricemic Mice

Zhaoqing Meng¹,², Yunxia Yan¹, Zhaohui Tang², Changrun Guo¹, Na Li², Wenzhe Huang², Gang Ding², Zhenzhong Wang², Wei Xiao², Zhonglin, Yang¹

Affiliations

¹State Key Laboratory of Natural Medicines, China Pharmaceutical University, Nanjing, China

²Jiangsu Kanion Pharmaceutical Co. Ltd, Lianyungang, China

Correspondence

Professor Wei Xiao

Jiangsu Kanion Pharmaceutical Co. Ltd.

No. 58 Haichang South Road

Lianyungang, 222001

China

Phone and Fax: +86 518 8115 2367
Histological analyses

In brief, the renal samples were fixed in 10% formalin, dehydrated in gradual ethanol, embedded in paraffin, cut into 4 μm thick sections, and stained with hematoxylin and eosin staining (HE). The sections were imaged using a light microscope for conventional morphological evaluation.

Results

The representative pictures of HE staining are shown in Fig. 1S. In contrast to the control group, inflammatory cell infiltration as well as the proliferation of fibrous tissue were found in the renal interstitial tissue of the adenine and ethambutol-treated mice. Glomeruli displayed partial atrophy. Tubular cells also showed different degrees of diffuse swelling and monosodium urate (MSU) crystals were visible in the tubules and interstitium. In the rhein-treated group, kidney damage was attenuated to various extents. However, allopurinol did not improve the renal damage significantly.
Fig. 1S Effects of rhein on pathological changes in the renal tissue of mice. All sections were stained with hematoxylin and eosin. (A) Control, (B) model, (C) allopurinol 10 mg/kg, (D) rhein 75 mg/kg, (E) rhein 150 mg/kg, and (F) rhein 300 mg/kg.