Accepted Manuscript

Design, synthesis and biological evaluation of novel xanthine oxidase inhibitors bearing a 2-arylbenzo[*b*]furan scaffold

Hong-Jin Tang, Wei Li, Mei Zhou, Li-Ying Peng, Jin-Xin Wang, Jia-Huang Li, Jun Chen

PII: S0223-5234(18)30118-1

DOI: 10.1016/j.ejmech.2018.01.096

Reference: EJMECH 10173

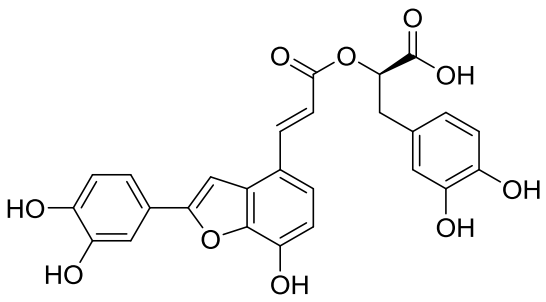
To appear in: *European Journal of Medicinal Chemistry*

Received Date: 10 October 2017

Revised Date: 25 January 2018

Accepted Date: 30 January 2018

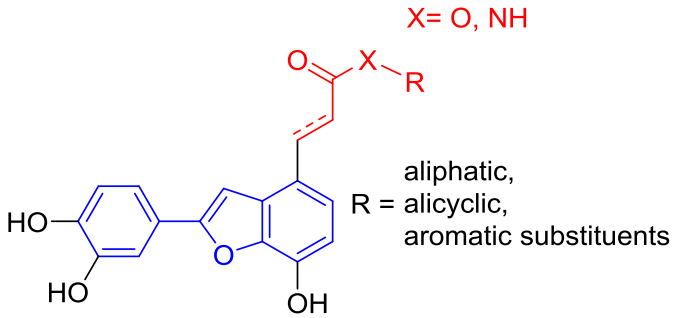
Please cite this article as: H.-J. Tang, W. Li, M. Zhou, L.-Y. Peng, J.-X. Wang, J.-H. Li, J. Chen, Design, synthesis and biological evaluation of novel xanthine oxidase inhibitors bearing a 2-arylbenzo[*b*]furan scaffold, *European Journal of Medicinal Chemistry* (2018), doi: 10.1016/j.ejmech.2018.01.096.



Salvianolic acid C
non-purine XO inhibitor

Design

Synthesize



2-arylbenzo[*b*]furan derivatives

XO inhibitory assay
DPPH assay

Celluar assay
Hyperuricemic mice model

SAR analysis

Molecular modeling

The binding mechanisms