**Suppl. 1-** **Dose response curves**

**Antioxidation and Cytoprtection of Acteoside and its Derivatives: Comparison and Mechanistic Chemistry**

Xican Li 1,2, \*,†, Yulu Xie 1,2,†, Ke Li 3,4, Aizhi Wu 1,2, \*, Hong Xie 1,2, Qian Guo 1,5, Penghui Xue 1, Yerkingul Maleshibek 1, Wei Zhao 6, Jiasong Guo 7, and Dongfeng Chen 3,4

1 School of Chinese Herbal Medicine; Guangzhou University of Chinese Medicine, Guangzhou 510006, China. E-mails: xieyulu1900@163.com (Y.X.); xiehongxh1@163.com (H.X.); 15622178307@163.com (Q.G.); 15228738137@163.com (P.X.); pandiphd@163.com (Y.M.);

2 Innovative Research & Development Laboratory of TCM; Guangzhou University of Chinese Medicine, Guangzhou 510006, China.

3 School of Basic Medical Science, Guangzhou University of Chinese Medicine, Guangzhou, China, 510006; E-mails: [ys1090992678@163.com](mailto:ys1090992678@163.com) (K.L.)

4 The Research Center of Basic Integrative Medicine, Guangzhou University of Chinese Medicine, Guangzhou, China, 510006. E-mail: chen888@gzucm.edu.cn (D.C.)

5 School of Basic Medical Science; Guangdong Pharmaceutical University, Guangzhou, China, 510007.

6 ZhongshanSchool of Medicine; Sun Yat-sen University, No.74 Zhongshan Road. 2, Guangzhou, 510080, China.

7 Department of Histology and Embryology, Southern Medical University, Guangzhou, 510515, China.

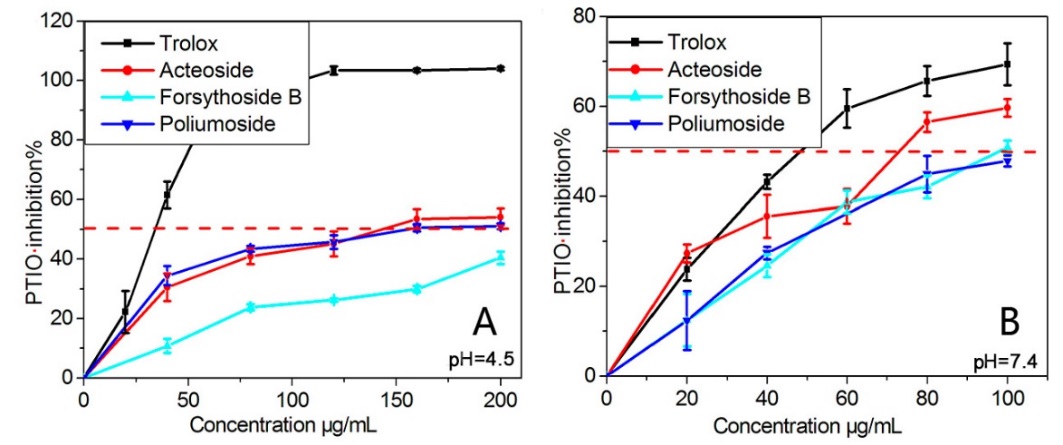
\*Correspondence author:

E-mail：[lixican@126.com](mailto:lixican@126.com) [wuaizhi@gzucm.edu.cn](mailto:wuaizhi@gzucm.edu.cn)

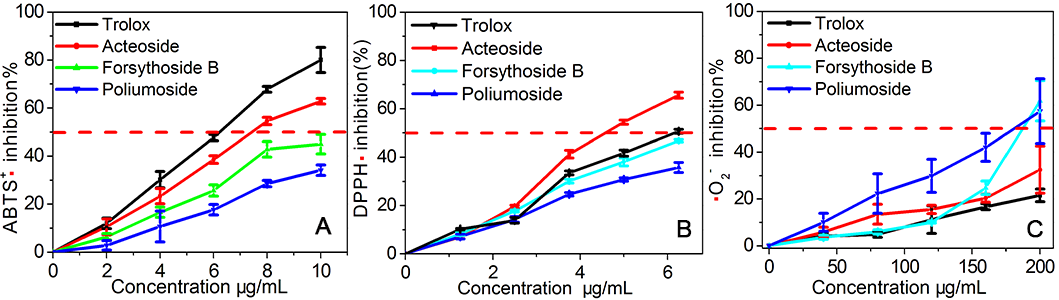
Homepage:[www.researchgate.net/profile/Xican\_Li](http://www.researchgate.net/profile/Xican_Li)

****

**Figure S1.** Relative metal-reducing power of acteoside and its derivatives: A, FRAP assay; B, CUPRAC assay. Each value is expressed as the mean±SD (n=3)

****

**Figure S2.** PTIO•-scavenging abilities of acteoside and its derivatives: A, pH 4.5; B, pH 7.4 Each value is expressed as the mean±SD (n=3)

****

**Figure S3.** The effects of acteoside and its derivative scavenge in ABTS•+-scavenging (A), DPPH•+-scavenging (B), and (C) •O2--scavenging. Each value is expressed as the mean±SD (n=3)