Natural cyclopeptide RA-XII, a new autophagy inhibitor, suppresses protective autophagy for enhancing apoptosis through AMPK/mTOR/P70S6K pathways in HepG2 cells

Lihua Song^{1,†}, Zhe Wang^{1,†}, Yurong Wang¹, Di Guo¹, Jianhong Yang², Lijuan Chen² and Ninghua Tan^{1,3,*}

- ¹ School of Traditional Chinese Pharmacy, China Pharmaceutical University, 639 Longmian Avenue, Nanjing 211198, China; songlihua4835@163.com(L.S.); wangzhe153807105@163.com(Z.W.); yurong1987213@163.com(Y.W.); guodi33@163.com(D.G.)
- ² State Key Laboratory of Biotherapy, Sichuan University, and Collaborative Innovation Center for Biotherapy, Chengdu 610041, China; yjh0742043024@hotmail.com(J.Y.); ljchen@scu.edu.cn(L.C.)
- ³ State Key Laboratory of Phytochemistry and Plant Resources in West China, Kunming Institute of Botany, Chinese Academy of Sciences, Kunming 650201, China
- * Correspondence: nhtan@cpu.edu.cn; Tel.: +86-25-84155947
- † These authors contributed equally to this work.

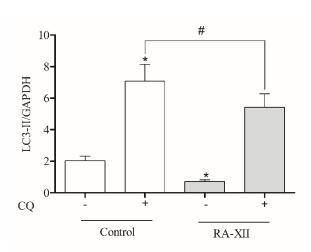


Figure S1. Statistical graph of Figure 3E. HepG2 cells were treated with or without RA-XII (5 μ M) in the presence or absence of CQ (25 μ M) for 48 h, and the marker of autophagy LC3-II were analyzed by Western blot. These bands were quantified by statistical graph. The data are presented as mean ± SEM of three independent experiments. (*p<0.05, vs Control, #p<0.05, vs indicated treatment.)