Supporting Information

Figure S1

The synthetic routes of 9a. Reagents and conditions: (a) P₂S₅, THF, rt; (b) Br₂, Et₂O, 0°C then to room temperature (RT); (c) 12N HCl, CH₃COOH, MeOH, 50°C then to 70°C; (d) MeOH, reflux; (e) 1N-NaOH, MeOH, THF, RT; (f) EDCI, HOBt hydrate, NH₂OH·HCl, TEA, CH₃CN, DMF, RT. (E)-3-phenylprop-2-enethioamide (2) was prepared from thiation of cinnamide (1) under Lawesson's reagent. Diethyl 2-acetylpentanedioate (3) was treated with bromine to afford acyl bromide, which was converted to methyl 6-chloro-5-oxohexanoate (5) using 12N HCl and acetic acid. Next, (E)-3-phenylprop-2-enethioamide (2) was coupled with methyl 6-chloro-5-oxohexanoate (5) to give (E)-methyl 4-(2-styrylthiazol-4-yl)butanoate (6). Treatment of (E)-methyl 4-(2-styrylthiazol-4-yl)butanoate (6) with NH₂OH·HCl, EDCI, HOBt hydrate produced the compound 9a. Commercially available reagents were used without

additional purification, unless otherwise stated. All reactions were performed under an inert atmosphere of nitrogen or argon. Nuclear magnetic resonance spectra (1 H and 13 C NMR) were recorded on a Bruker Unity 300 MHz and Varian Unit 500 MHz spectrometer for CD₃OD solutions, and chemical shifts are reported as parts per million (ppm) relative to, respectively, residual CD₃OD δ H (3.31 ppm) and CD₃OD δ C (49.00 ppm) as internal standards. Resonance patterns are reported with the notations s (singlet), d (doublet), t (triplet), q (quartet), and m (multiplet). Coupling constants (J) are reported in hertz (Hz). Thin layer chromatography was carried out using plates coated with Kieselgel 60F254 (Merck). For flash column chromatography, E. Merck Kieselgel 60 (230-400 mesh) was used.

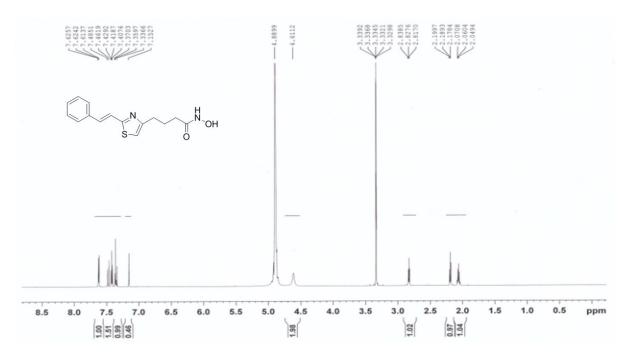


Figure S2

¹H NMR spectrum of 9a. ¹H NMR (500MHz, CD₃OD): δ 7.62 (d, J = 5.6 Hz, 2H), 7.48-7.33 (m, J = 5H), 7.15 (s, 1H), 2.83-2.81 (t, J = 10 Hz, 2H), 2.19-2.17 (t, J = 10 Hz, 2H), 2.07-2.05 (t, J = 10 Hz, 2H)

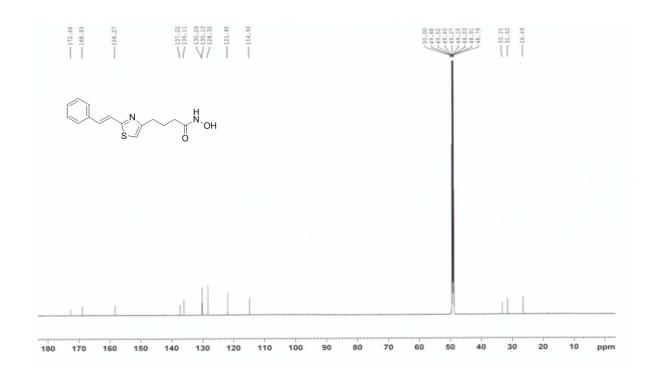


Figure S3¹³C NMR spectrum of 9a. ¹³C NMR (125MHz, CD₃OD): δ 172.64, 168.93, 158.27, 137.22, 136.11, 130.29, 130.13, 128.35, 121.95, 114.92, 33.25, 31.52, 26.49

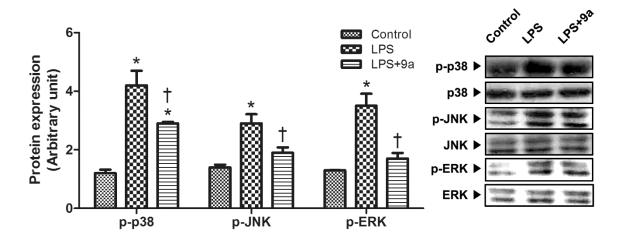


Figure S4

Effect of 9a on phosphorylation of MAPK in LPS-stimulated Kupffer cells. Kupffer cells were isolated from SD rats (male; 160-180 g) by differential centrifugation using Percoll. After the liver was digested with collagenase-contained buffer, the suspension was filtered through cell strainer and cell fraction was obtained by centrifugation. The Kupffer cells fraction was collected, centrifuged at 1700 rpm for 5 min and suspended again in RPMI 1640 media. The Kupffer cells were incubated with 12.5 μ M 9a 1 h before LPS treatment (10 ng·mL⁻¹). The cell were harvested 24 h after LPS treatment. Phosphorylation of p38, JNK and ERK significantly increased to 3.5-, 2.1- and 2.7-fold than those of control group. The results are presented as mean \pm SEM of independent experiments. Significantly different (*P<0.05) from control. Significantly different (*P<0.05) from LPS.