Supplementary Materials for

Histone Deacetylase inhibitory and cytotoxic activities of the constituents from the roots of *Sophora pachycarpa*

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Figures s 1 to s 6
Figure S1. The $^1$H-NMR of Isosophoranone
1H NMR (301 MHz, Acetone-d6) \( \delta \) 12.24 (s, 1H), 7.41 (d, \( J = 8.3 \) Hz, 1H), 6.50 (d, \( J = 2.2 \) Hz, 1H), 6.47 (dd, \( J = 8.3, 2.3 \) Hz, 1H), 6.05 (s, 1H), 5.67 (dd, \( J = 13.2, 2.7 \) Hz, 1H), 5.01 (t, \( J = 6.8 \) Hz, 1H), 4.61 (s, 0H), 4.58 (s, 1H), 3.06 (dd, \( J = 17.1, 13.2 \) Hz, 2H), 2.76 (dd, \( J = 17.1, 2.9 \) Hz, 1H), 2.68 – 2.63 (m, 3H), 2.61 – 2.56 (m, 1H), 2.06 (s, 2H), 1.67 (s, 3H), 1.58 (s, 4H), 1.51 (s, 3H).

**Figure S2.** The 1H-NMR of Sophoraflanone G
Figure S3. The 1H-NMR of (2- (4-hydroxyphenyl)-2, 3-dihydrobenzo [b] furan-3, 4, 6-triol)
$^1$H NMR (301 MHz, DMSO-d$_6$): 12.14 (s, 1H), 9.74 (s, 1H), 9.45 (s, 1H), 9.32 (s, 1H), 8.84 (s, 2H), 7.27 (d, $J = 8.5$ Hz, 1H), 6.91 (d, $J = 8.5$ Hz, 2H), 6.53 (d, $J = 8.5$ Hz, 2H), 6.38 (d, $J = 2.1$ Hz, 1H), 6.30 (dd, $J = 8.5, 2.1$ Hz, 1H), 5.90 (d, $J = 8.1$ Hz, 1H), 5.86 (t, 1H), 5.70 - 5.58 (m, 1H), 5.60 (d, $J = 2.0$ Hz, 3H), 4.96 (t, 1H), 4.69 (s, 1H), 4.57 (s, 1H), 4.53 (d, $J = 8.3$ Hz, 1H), 3.25 (dd, $J = 17.1, 13.5$ Hz, 1H), 2.68 (dd, $J = 17.0, 2.5$ Hz, 2H), 2.57 (m, 2H), 2.46 (m, 1H), 2.08 - 1.93 (m, 2H), 1.62 (s, 3H), 1.54 (s, 3H), 1.48 (s, 3H).

**Figure S4.** The $^1$H-NMR of Alopecurone J
Figure S5. The 1H-NMR of Alopecurone P
Figure S6. Dose-dependent growth inhibition of HeLa, HCT116, A2780 and A549 cells by test compounds (6.25–100 μM) after 48 h. Viability was quantitated by AlamarBlue assay. Vorinostat was used as a positive control. Results are mean ± SD (n = 3).