

# Morusflavone, a new therapeutic candidate for prostate cancer by CYP17A1 inhibition: Exhibited by molecular docking and dynamics simulation

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## Supplementary electronic material

**Morusflavone:** UV (MeOH,  $\lambda_{\text{max}}$ , nm): 241, 264, 310 (log  $\epsilon$  4.1, 4.2, 3.7) [1]; IR (KBr,  $\nu_{\text{max}}$ ,  $\text{cm}^{-1}$ ): 3399, 3210, 2965, 2913, 2855, 1680, 1653, 1623, 1554, 1445, 1417, 1361, 1291, 1237, 1165, 1132, 1054, 978, 836 [1]; <sup>1</sup>H NMR (DMSO-*d*<sub>6</sub>, 300 MHz):  $\delta$  ppm, 6.45 (1H, brs, H-3), 6.28 (1H, brs, H-6), 7.07 (1H, d,  $J$  = 8.4 Hz, H-5'), 6.37 (1H, d,  $J$  = 8.4 Hz, H-6'), 5.13 (1H, brs, H-1'''), 3.26 (1H, m, H-3'''), 1.57 (3H, brs, Me-4'''), 1.39 (3H, d,  $J$  = 6.5 Hz, Me-5'''), 3.24 (1H, dd,  $J$  = 7.3, 6.6 Hz, H<sub>2</sub>-1''a), 3.03 (1H, dd,  $J$  = 7.3, 6.3 Hz, H<sub>2</sub>-1''b), 5.03 (1H, brt,  $J$  = 6.6 Hz, H-2''), 1.52 (3H, brs, Me-4''), 1.53 (3H, brs, Me-5'') [1]; <sup>13</sup>C NMR (DMSO-*d*<sub>6</sub>, 75 MHz):  $\delta$  ppm 160.83 (C-2), 102.76 (C-3), 181.61 (C-4), 160.03 (C-5), 97.68 (C-6), 161.41 (C-7), 106.53 (C-8), 158.79 (C-9), 105.30 (C-10), 130.55 (C-1'), 119.25 (C-2'), 154.87 (C-3'), 156.15 (C-4'), 111.29 (C-5'), 103.42 (C-6'), 23.21 (C-1''), 122.01 (C-2''), 130.09 (C-3''), 24.90 (C-4''), 24.92 (C-5''), 121.56 (C-1'''), 130.57 (C-2'''), 78.69 (C-3'''), 20.83 (C-4'''), 16.93 (C-5''') [1]; +ve FAB-MS ( $m/z$ ,  $I_{\text{rel}}$ , %): 421 [M+H]<sup>+</sup> (C<sub>25</sub>H<sub>25</sub>O<sub>6</sub>) (31.8), 351 (8.7), 200 (5.3), 220 (3.8) [1].

## Reference

1. Ali, A.; Ali M. Isolation and structure elucidation of a new linoleyl glycoside and flavones from the stem bark of *Morus alba* L. Future J. Pharm. Sci. 2016, 2, 82-86. <https://doi.org/10.1016/j.fjps.2016.09.002>