*Molecules***2000**, *5*, M191

E,E-1-(4-Bromophenyl)-5-(3-indolyl)-1,4-pentadien-3-one

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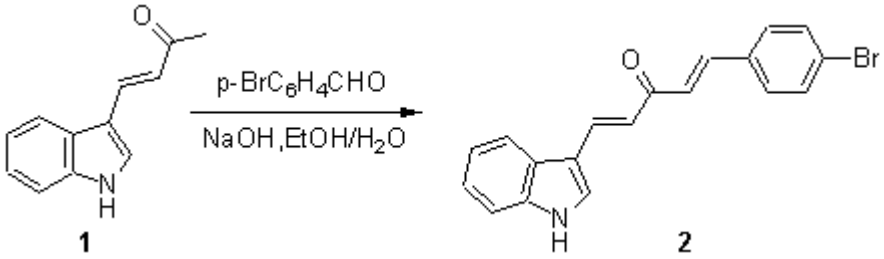
Received: 20 September 2000 / Accepted: 30 November 2000 / Published: 25 December 2000



3-(1-Butenone-3)indole **1** was prepared by previously published method [1]. The solution of **1** (93mg, 0.5mmol), p-bromobenzaldehyde (93mg, 0.5mmol), sodium hydroxide (100mg) in a mixture of ethanol (2ml) and water (2ml) was stirred at room temperature for 24 hours. The precipitate was then filtered and washed with water for several times. The crude product was purified by recrystalisation from acetone to give a yellow powder of *E,E*-1-(4-bromophenyl)-5-(3-indolyl)-1,4-pentadien-3-one (106mg, 60%).

Mp: 259-260ºC.

IR (KBr, cm^{-1}):3174.6 (N-H), 1643.2 (C=O), 1612.4 (C=C), 1569.9, 1515.9, 1488.9, 1434.9, 1346.2, 1195.8, 1130.2, 964.3, 848.6, 744.5.

UV-Vis (nm): 215.5, 311.5, 465.0.

^{1}H NMR (400 MHz, DMSO-d_6): 7.14 (d, J=16Hz, 1H, 4-H); 7.19-7.27 (m, 2H, 5'-H, 6'-H); 7.47 (d, J=16Hz, 1H, 2-H); 7.47-7.52 (m, 1H, 7'-H); 7.63 (d, J=16Hz, 1H, 5-H), 7.66 (d, J=8.4Hz, 2H, 3"-H, 5"-H); 7.76 (d, J=8.4Hz, 2H,2"-H, 6"-H); 8.05 (d, J=16Hz, 1H, 1-H); 8.02 (d, J=2.8Hz, 1H, 2'-H); 8.05-8.09 (m, 1H, 4'-H), 11.88 (s, 1H, 1'-H).

MS m/z: 352 (M^+).

Acknowledgement: This research was supported by the NSF of China (NO:29972009) and the NSF of Gansu Province (NO:ZS991-A23-059-Y).

References

1. Xie, J.; Xie, L.; Gu, Z.; Liu, Y.; Wang, Z. *Acta Pharmaceutica Sinica* **1994**, 23, 732- 736.

Sample availability: not available.