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1-(*o*-Hydroxyphenyl)-3-phenylpropenone *N*-Benzoylhydrazone

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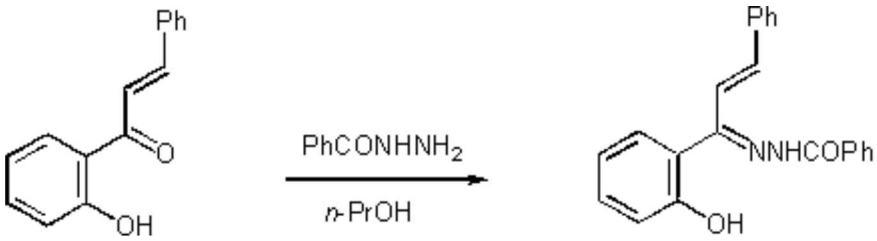
As part of a research programme targeting novel molecules derived from o-hydroxyaryl ketone hydrazones[1], we synthesised 1-(o-hydroxyphenyl)-3-phenylpropenone *N*-benzoylhydrazone.



1-(*o*-Hydroxyphenyl)-3-phenylpropenone was prepared according to the literature method [2]. Benzoic hydrazide is commercially available and was supplied by Aldrich. Benzoic hydrazide (0.63 g, 4.5 mmol) was added to a solution of 1-(*o*-hydroxyphenyl)-3-phenylpropenone (1 g, 4.5 mmol) in propanol-1 (10 mL). The reaction mixture was refluxed for 24 hours. It was then allowed to cool at room temperature. Subsequently, it was stored in the refrigerator overnight. Filtration of the precipitate, which was formed, afforded (1.38 g, 90 %) of the desired 1-(*o*-hydroxyphenyl)-3-phenylpropenone *N*-benzoylhydrazone as white crystals. The product was identified by ^{1}H NMR, ^{13}C NMR and MS and it was subjected to elemental analysis without further purification.

M.p. 201-202 °C.

1H NMR (400 MHz, DMSO-d_6): 6.94-7.03 (m, 3H), 7.33-7.59 (m, 10H), 7.8-8.15 (m, 3H), 10.18 (s, 1H), 10.91 (s, 1H).

^{13}C NMR (100 MHz, DMSO-d_6): 116.9, 118.1, 120.0, 120.6, 121.9, 125.3, 126.1, 127.0, 127.8, 128.4, 128.7, 128.9, 129.2, 131.3, 132.0, 132.4, 140.2, 157.2.

MS m/z (ES+): 707 $[2M+Na]^+$, 365 $[M + Na]^+$.

Anal. Calc. for $C_{22}H_{18}N_2O_2$: C 77.17, H 5.29, N 8.18; found: C 77.20, H 5.27, N, 8.19.

References and Notes

1. Kotali, A.; Harris, P. A. *Org. Prep. Proc. Int.* **1994**, *26*, 159 - 192.

2. Thakkar, K.; Cushman, K. *Tetrahedron Lett.* **1994**, *35*, 6441 - 6444.

Sample availability: available from the authors and MDPI.