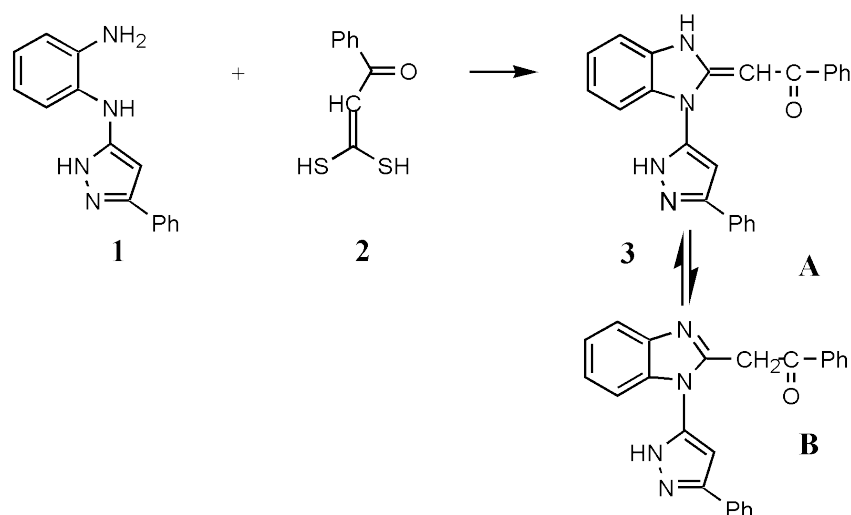


(3(5) Phenylpyrazol-5(3)-yl)-2-benzoylmethyl Benzimidazole

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Scheme 1

The compound **3**, which exists in tautomeric equilibria between enamine (form A) and methylene imine (form B) as shown in scheme 1, was prepared by addition of the 3,3-dimercapto-1-phenyl-prop-2-ene-1-one **2** to 3-N-(2-aminophenylamino)-5-phenylpyrazole **1** [1]. A mixture of dimercapto propenone **2** (1.96 g, 0.01 mol) and 3-N (2-aminophenylamino)-5-phenylpyrazole **1** (2.50 g, 0.01 mol) in xylene (60 mL) was refluxed for 2 h. After removal of the solvent, the residue was purified by crystallization (ethanol) to afford **3** in good yield (3.02 g, 80%).

Mp.: 166-168 °C.

MS DCI (NH₃): [M+H]⁺: 379.

IR (KBr, cm⁻¹): 1680(ν_{C=O}), 3372 (ν_{NH}).

¹H NMR (DMSO-d₆) δ: 13.79 (s, 1H, NH), 13.50 (s, 1H, NH), 9.14 (s, 1H, NH), 7.99-7.01 (m, 14H), 6.80 (s, 1H, C4'H), 6.19 (s, 1H, C2=CH), 3.40 (s, 2H, C2-CH₂).

Anal. Calc. For C₂₄H₁₈N₄O (378): C 76.19, H 4.76, N 14.81; Found: C 76.05, H 4.73, N 14.32.

Reference

1. Essassi, E. M.; Salem, M.; *Bull. Soc. Chim. Belg.* **1985**, *94*, 755.

Sample Availability: Available from the authors and from MDPI.