Supporting Informations
A Simple Preparation of Ketones. *N*-Protected α-Amino Ketones from α-Amino Acids.
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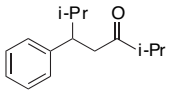
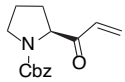
Experimental Section

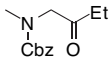
The *N*-protected amino acids were prepared according standard methods and their purities were established before utilization by melting point and optical rotation. Although the 2-chloro-4,6-dimethoxy[1,3,5]triazine (CDMT) was commercially available, we prepared it following a published procedure.[1] Cyanuric chloride and vinylmagnesium bromide were purchased from Aldrich.
Elemental analyses were performed on a Perkin-Elmer 420 B analyser, optical rotations were measured with a Perkin-Elmer 241 automatic polarimeter in a 1 dm tube. The ^{1}H NMR (300 MHz) and ^{13}C NMR (75.4 MHz) were obtained with a Varian VXR-300 spectrometer from $CDCl_3$ solutions.



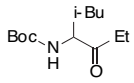
2,7-Dimethyl-6-phenyloctan-4-one, 3:
CDMT (0.74 g, 4.4 mmol) and NMM (1.2 mL, 11.1 mmol) were added to a solution of cinnamic acid (0.55 g, 3.7 mmol) in THF (11 mL) maintained at room temperature. The white precipitate formed during stirring for 1 h was filtered off under argon, CuI (0.70 g, 3.7 mmol) was added to this solution and then at 0°C, slowly, a THF solution (5 mL) of *iso*-propylmagnesium bromide (3.7 mL of 1N Et_2O solution, 3.7 mmol). After being stirred for additional 2-3 h at room temperature, the reaction mixture was quenched with aqueous saturated NH_4Cl and extracted two times with 10 mL of diethylether. The combined organic phases were washed with 15 ml of sat. Na_2CO_3, HCl 1N, followed by 15 mL of brine. The organic layer was dried over anhydrous Na_2SO_4 to give, after evaporation of solvent, a crude product from which compound **3** was obtained through a silica gel column chromatography by using hexane/ethyl acetate 9:1: ^{1}H NMR, δ, 7.22–7.10 (m, 5H), 2.95 (m, 1H), 2.71 (m, 2H), 2.39 (m, 1H), 1.83 (m, 1H), 0.70-0.98 (m, 12H); ^{13}C NMR, δ, 212.5, 144.2, 130.2, 129.0, 127.6, 47.7, 44.6, 41.2, 32.9, 20.4, 17.8. Anal. Calcd for $C_{15}H_{22}O$ (218.17): C, 82.52; H, 10.16. Found: C, 82.55; H, 10.15.



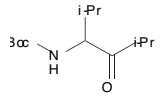
2-Acryloyl-pyrrolidine-1-carboxylic acid benzyl ester, 7:
Recovered as colorless oil after purification with silica gel column chromatography by using hexane-ethyl acetate 9:1 as an eluent (48% yield), $[\alpha]^{20}_D$ –36.3° (*c* 0.56, $CHCl_3$).^{1}H NMR, δ,(mixture of conformers) 7.39 (m, 5H), 6.37 (m, 1H, J=17.4 Hz), 6.31 (m,1H, J=10.1, 17.4 Hz), 5.78 (dd,1H, J=10.1 Hz), 5.07 (m, 2H), 4.61 (m, 1H), 3.54 (m, 2H), 2.16 (m, 1H), 1.85 (m, 3H); ^{13}C NMR, δ, 198.5, 198.3, 155.1, 154.7, 136.9, 136.6, 133.1, 133.3, 129.9, 128.6, 128.5, 128.2, 128.0, 67.1, 63.7, 47.1, 46.9, 30.3, 29.2, 24.3, 23.7. Anal. Calcd for $C_{15}H_{17}NO_3$ (259.12): C, 69,48; H, 6,61; N, 5,40. Found: C, 69.49; H, 6.63, N, 5.38.



Methyl-(2-oxobutyl)-carbamic acid benzyl ester, 8:
^{1}H NMR, δ, (mixture of conformers) 7.42 (m, 5H), 5.20 (dlike, 2H), 4.12 (dlike, 2H), 3.05 (s, 3H), 2.52 (q, 1H), 2.42 (q, 1H), 1,14 (m, 3H); ^{13}C NMR, δ, 206.8, 156.4, 136.8, 128.0, 128.2, 128.7, 67.6, 58.1, 32.9, 7.6. Anal. Calcd for $C_{13}H_{17}NO_3$ (235.12): C, 66,36; H, 7,28; N, 5,95. Found: C, 66.39; H, 7.23, N, 5.95.

(1-*Iso*butyl-2-oxobutyl)-carbamic acid *tert*-butyl ester, 9: 

^{1}H NMR, δ, 5.07 (bs, 1H), 4.25 (m, 1H), 2.48 (q, 2H), 1.85 (m, 1H), 1.41 (s, 9H), 1.25 (dd, 2H), 1.05 (t, 3H), 0.90 (m, 6H); ^{13}C NMR, δ, 205.6, 156.4, 64.1, 61.1, 37.4, 28.6, 24.5, 16.2, 11.8, 7.73. Anal. Calcd for $C_{13}H_{25}NO_3$ (243,18): C, 64,16; H, 10,36; N, 5,76. Found: C, 64.19; H, 10.36, N, 5.75.

(1-*Iso*propyl-3-methyl-2-oxobutyl)-carbamic acid *tert*-butyl ester, 10: 

^{1}H NMR, δ, (mixture of conformers) 4.91 (d, 1H), 4.12 (m, 1H), 2.78 (m; 1H), 2.55 (m, 1H), 1.53 (s, 7H), 1.44 (s, 2H), 1.08-0.81(m, 12H); ^{13}C NMR, δ, 209.3, 157.4, 63.1, 50.8, 31.5, 28.6, 23.4, 17.7, 15.4. Anal. Calcd for $C_{13}H_{25}NO_3$ (243,18): C, 64,16; H, 10,36; N, 5,76. Found: C, 64.19; H, 10.36, N, 5.75.

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1) Cronin, J.S.; Ginah, F. O.; Murray, A.R.; Copp, J. D. *Synth. Commun.* **1996**, *26*, 3491.