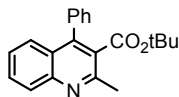
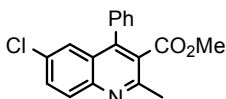


Selected data:



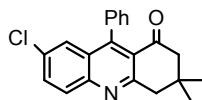
Product 3c

White solid; mp 107 °C; FT-IR (KBr):  $\nu$ : 3147, 2995, 2846, 1705, 1652, 1484, 1427, 1371, 1220, 1074, 891, 755  $\text{cm}^{-1}$ .  $^1\text{H NMR}$  (250 MHz,  $\text{CDCl}_3$ ):  $\delta$ : 1.36 (s, 9H), 3.1 (s, 3H), 7.20–8.9 (m, 9H). MS:  $m/z$  319.



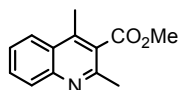
Product 3e

Yellow solid; mp 131 °C; FT-IR (KBr):  $\nu$ : 3144, 2989, 2863, 1713, 1641, 1477, 1268, 1079, 708  $\text{cm}^{-1}$ .  $^1\text{H NMR}$  (250 MHz,  $\text{CDCl}_3$ ):  $\delta$ : 2.24 (s, 3H), 3.37 (s, 3H), 7.36–7.64 (m, 8H). MS:  $m/z$  311.



Product 3j

Yellow solid; mp 215 °C; FT-IR (KBr):  $\nu$ : 3070, 2944, 2866, 1693, 1551, 1473, 1381, 1290, 1200, 1126, 1077, 838, 697  $\text{cm}^{-1}$ .  $^1\text{H NMR}$  (250 MHz,  $\text{CDCl}_3$ ):  $\delta$ : 1.13 (s, 6H), 2.62 (s, 2H), 3.28 (s, 2H), 7.23–8.14 (m, 8H). MS:  $m/z$  335.



Product 3k

White solid; mp 100 °C; FT-IR (KBr):  $\nu$ : 2932, 2849, 1658, 1548, 1488, 1430, 1386, 1279, 1217, 1104, 869, 745.  $^1\text{H NMR}$  ( $\text{CDCl}_3$ , 250 MHz):  $\delta$  2.38 (3H, s), 2.50 (3H, s), 3.55 (3H, s), 7.22 (1H, t,  $J = 7.5$  Hz), 7.36 (1H, d,  $J = 8.2$  Hz), 7.50 (1H, t,  $J = 7.6$  Hz), 7.76 (1H, d,  $J = 8.0$  Hz). MS:  $m/z$  215.