Supporting Information for

Suzuki-Miyaura cross-coupling of 3-pyridyl triflates with 1-alkenyl-2-pinacol boronates

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All reactions involving air sensitive materials were carried out in oven-dried glassware under an argon atmosphere. Acetone was dried by stirring with boron oxide (5% w/v) overnight before filtration and distillation.1 Dichloromethane, ether, THF, and toluene were dried by passing the solvent through a column of activated alumina under nitrogen immediately prior to use. Anhydrous DMSO and DMF were used as received from commercial suppliers. 1,4-Dioxane was purified by distilling from sodium benzophenone ketyl under argon. Triethylamine was purified by distilling from CaH2 (bp 89 ºC) and stored over KOH pellets. Methanesulfonyl chloride was purified by distilling from P2O5 (bp 57 – 58 ºC @ 18 mmHg). Potassium acetate was dried immediately prior to use with a Kügelrohr apparatus (0.2 mmHg, 100 ºC). Comins’ triflimide2 and KOPh3 were prepared as reported in the literature. Pyridyl triflates 4a4, 4b5, and 4c5 have been previously reported. Alkenyl triflate 8a6 and alkenyl bromides 8c and 8d7 were prepared according to literature procedures.

All TLC analysis used 0.25 mm silica layer fluorescence UV254 plates. Flash chromatography was carried out on hand-packed columns of silica gel (230-400 mesh). Medium pressure liquid chromatography (MPLC) was performed with commercially packed columns of silica gel at 60-200 psi, using a combination refractive index / UV detector. In all procedures, after extractive work-up with the solvents and solutions indicated, the combined organic solution washed with brine, dried (Na2SO4 or MgSO4), filtered, and the solvent removed by rotary evaporation unless otherwise indicated.

Infrared spectra (IR) were recorded by one of two methods: 1) as a thin film deposited from CDCl3 or CH2Cl2 on NaCl plates followed by solvent evaporation or 2) as a film on diamond ATR. All absorptions are reported in cm⁻¹. 1H NMR spectra were collected at 300 or 500 MHz and 13C spectra were collected at 75.5 or 125 MHz. 1H NMR spectra in CDCl3 are referenced to tetramethylsilane (TMS) at 0.00 ppm. NMR spectra in acetone d-6 are referenced to the solvent resonance at 2.17 ppm for 1H and 30.9 ppm for 13C. NMR spectra are reported using the following format: chemical shift [multiplicity (s = singlet, d = doublet, t = triplet, q = quartet, m = multiplet, app]
= apparent), coupling constant(s) (J), integral, and proton assignment]. All coupling constants are reported in Hertz. 

$^{13}$C NMR spectra are referenced to CDCl$_3$ at 77.0 ppm.
$^{13}$C NMR
(125 MHz, acetone-d$_6$)
$^1$H NMR (500 MHz, CDCl$_3$)
$^{13}$C NMR
(75 MHz, CDCl$_3$)
$^{1}H$ NMR
(500 MHz, CDCl$_3$)
$^1$H NMR (500 MHz, CDCl$_3$)
$^{13}$C NMR
(125 MHz, CDCl$_3$)
$^{1}H$ NMR

$(500$ MHz, CDCl$_3$)
$^{13}$C NMR
$(75$ MHz, CDCl$_3$)
$^{13}$H NMR (500 MHz, CDCl$_3$)
$^{13}$C NMR (125 MHz, CDCl$_3$)
$4e$

$^1$H NMR

(500 MHz, CDCl$_3$)
$^{13}$C NMR
(75 MHz, CDCl$_3$)
$^1$H NMR (500 MHz, CDCl$_3$)
$^{13}$C NMR (125 MHz, CDCl$_3$)
$^{1} \text{H NMR}$

($500 \text{ MHz}, \text{CDCl}_3$)
S22

15a

$^{13}$C NMR

(125 MHz, CDCl$_3$)
$15b$

$^1$H NMR

(500 MHz, CDCl$_3$)
$^{13}$C NMR (125 MHz, CDCl$_3$)
$15c$

$^1$H NMR

(300 MHz, CDCl$_3$)
$^{13}$C NMR (75 MHz, CDCl$_3$)
$^{1}H$ NMR (500 MHz, CDCl$_3$)
$^{13}$C NMR
(125 MHz, CDCl$_3$)
17

${}^1$H NMR

(500 MHz, CDCl$_3$)
$^{13}$C NMR
(125 MHz, CDCl$_3$)
$^1$H NMR (300 MHz, CDCl$_3$)
$^{13}$C NMR
(75 MHz, CDCl$_3$)
$^1$H NMR (600 MHz, CDCl₃)
$\text{H NMR}$ (500 MHz, CDCl$_3$)
Aromatic 

$^{13}$C NMR 

(125 MHz, CDCl$_3$)
\textbf{21}

$^1\text{H NMR}$

(500 MHz, CDCl$_3$)
$^1$H NMR (500 MHz, CDCl$_3$)
$^{13}$C NMR
(125 MHz, CDCl$_3$)
$^{1}$H NMR
g(500 MHz, CDCl$_3$)
$^{13}$C NMR
(125 MHz, CDCl$_3$)
$^{1}$H NMR
(500 MHz, CDCl$_3$)
$^13$C NMR (125 MHz, CDCl$_3$)
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$^1$H NMR

(500 MHz, CDCl$_3$)
$^{13}$C NMR
(125 MHz, CDCl$_3$)
$^{1}$H NMR (500 MHz, CDCl$_3$)
$^1$H NMR
$(500 \text{ MHz, CDCl}_3)$
$^{13}$C NMR (75 MHz, CDCl$_3$)
$^{1}H$ NMR

(500 MHz, CDCl$_3$)
$^{13}$C NMR

(125 MHz, CDCl$_3$)