Selectfluor-Promoted Direct Fluorination of the 4- or 5-Position of Imidazole Derivatives

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Supplementary Information

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1. General information

All commercially available compounds were purchased from Aldrich, Acro, and TCI (Shanghai), and all solvents were purified and dried according to standard methods prior to use. $^1$H, $^{13}$C and $^{19}$F NMR spectra were recorded in CDCl$_3$ unless otherwise indicated with a Bruker AC-300P spectrometer, using TMS as internal standard. ESI mass spectra were performed on an API-3000 LC-MS spectrometer. TLC analysis was carried out on silica gel plates GF$_{254}$ (Qindao Haiyang Chemical, China). Column chromatography was performed with silica gel 60 G (Qindao Haiyang Chemical, China).
2. NMR spectroscopic data of all compounds

$^1$H NMR spectrum of compound 2a

$^{13}$C NMR spectrum of compound 2a
$^{19}$F NMR spectrum of compound 2a

$^1$H NMR spectrum of compound 2b
$^{13}$C NMR spectrum of compound 2b

$^{19}$F NMR spectrum of compound 2b
$^1$H NMR spectrum of compound 2c

$^{13}$C NMR spectrum of compound 2c
$^{19}$F NMR spectrum of compound 2c

$^1$H NMR spectrum of compound 2d
$^{13}$C NMR spectrum of compound 2d

$^{19}$F NMR spectrum of compound 2d
$^1$H NMR spectrum of compound 4a

$^{13}$C NMR spectrum of compound 4a
$^{19}$F NMR spectrum of compound 4a

$^1$H NMR spectrum of compound 4b
$^{13}$C NMR spectrum of compound 4b

$^{19}$F NMR spectrum of compound 4b
$^1$H NMR spectrum of compound 4c

$^{13}$C NMR spectrum of compound 4c
$^{19}$F NMR spectrum of compound 4c

$^1$H NMR spectrum of compound 5a
$^{13}$C NMR spectrum of compound 5a

$^{19}$F NMR spectrum of compound 5a
$^1$H NMR spectrum of compound 6a

$^{13}$C NMR spectrum of compound 6a
$^{19}$F NMR spectrum of compound 6a