Supporting Information

Synthesis of difluoromethylated enynes by the reaction of α-(trifluoromethyl) styrenes with terminal alkynes

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$^1$H, $^{13}$C, $^{19}$F NMR and HRMS (EI) spectra of compounds 3

$^1$H NMR spectrum of 3aa

$^{13}$C NMR spectrum of 3aa
$^{19}$F NMR spectrum of 3aa

HRMS (EI) of 3aa
$^1$H NMR spectrum of 3ba

$^{13}$C NMR spectrum of 3ba
$^{19}$F NMR spectrum of 3ba

HRMS (EI) of 3ba
\(^1\)H NMR spectrum of 3ca

\(^{13}\)C NMR spectrum of 3ca
$^{19}$F NMR spectrum of 3ca

HRMS (EI) of 3ca
$^1$H NMR spectrum of 3da

$^{13}$C NMR spectrum of 3da
$^{19}$F NMR spectrum of 3da

HRMS (EI) of 3da
$^1$H NMR spectrum of 3ea

$^{13}$C NMR spectrum of 3ea
$^{19}$F NMR spectrum of 3ea

HRMS (EI) of 3ea
$^1$H NMR spectrum of 3fa
$^{13}$C NMR spectrum of 3fa

$^{19}$F NMR spectrum of 3fa
HRMS (EI) of 3fa
$^1$H NMR spectrum of (E)-3ga

$^{13}$C NMR spectrum of (E)-3ga
$^{19}$F NMR spectrum of (E)-3ga

HRMS (EI) of (E)-3ga
$^1$H NMR spectrum of (Z)-3ga

$^{13}$C NMR spectrum of (Z)-3ga
$^{19}$F NMR spectrum of (Z)-3ga

HRMS (EI) of (Z)-3ga
1H NMR spectrum of (E)-3ha

13C NMR spectrum of (E)-3ha
$^{19}$F NMR spectrum of (E)-3ha

HRMS (EI) of (E)-3ha
$^1$H NMR spectrum of (Z)-3ha

$^{13}$C NMR spectrum of (Z)-3ha
$^{19}$F NMR spectrum of (Z)-3ha

HRMS (EI) of (Z)-3ha
\(^1\)H NMR spectrum of (E)-3ia

\[^{13}\]C NMR spectrum of (E)-3ia
$^{19}$F NMR spectrum of (E)-3ia

HRMS (EI) of (E)-3ia
$^1$H NMR spectrum of (Z)-3ia

$^{13}$C NMR spectrum of (Z)-3ia
\textbf{19F NMR spectrum of (Z)-3ia}

\textbf{HRMS (EI) of (Z)-3ia}
$^1$H NMR spectrum of (E)-3ja

$^{13}$C NMR spectrum of (E)-3ja
$^{19}$F NMR spectrum of (E)-3ja

HRMS (EI) of (E)-3ja
$^1$H NMR spectrum of (Z)-3ja

$^{13}$C NMR spectrum of (Z)-3ja
$^{19}$F NMR spectrum of (Z)-3ja

HRMS (EI) of (Z)-3ja
$^1$H NMR spectrum of (E)-3ka

$^{13}$C NMR spectrum of (E)-3ka
$^{19}$F NMR spectrum of (E)-3ka

HRMS (EI) of (E)-3ka
$^1$H NMR spectrum of (Z)-3ka

$^{13}$C NMR spectrum of (Z)-3ka
$^{19}$F NMR spectrum of (Z)-3ka

![NMR Spectrum](image)

HRMS (EI) of (Z)-3ka

![HRMS Spectrum](image)
$^{1}H$ NMR spectrum of $(E)$-3la

$^{13}C$ NMR spectrum of $(E)$-3la
$^{19}$F NMR spectrum of (E)-3la

HRMS (EI) of (E)-3la
$^1$H NMR spectrum of (Z)-3la

$^{13}$C NMR spectrum of (Z)-3la
$^{19}$F NMR spectrum of (Z)-3la

HRMS (EI) of (Z)-3la
$^1$H NMR spectrum of (E)-3ab

$^{13}$C NMR spectrum of (E)-3ab
$^{19}$F NMR spectrum of $(E)$-3ab

HRMS (EI) of $(E)$-3ab
$^{19}\text{F NMR spectrum of (Z)-3ab}$

$\text{HRMS (EI) of (Z)-3ab}$
$^1$H NMR spectrum of (E)-3ac

$^{13}$C NMR spectrum of (E)-3ac
$^{19}\text{F NMR spectrum of (E)-3ac}$

$\text{HRMS (EI) of (E)-3ac}$
\(^1\)H NMR spectrum of (Z)-3ac

\(^{13}\)C NMR spectrum of (Z)-3ac
$^{19}$F NMR spectrum of (Z)-3ac

HRMS (EI) of (Z)-3ac
$^1$H NMR spectrum of 3ad

$^{13}$C NMR spectrum of 3ad
$^{19}$F NMR spectrum of 3ad

HRMS (EI) of 3ad
$^1$H NMR spectrum of 3ae

$^{13}$C NMR spectrum of 3ae
$^{19}F$ NMR spectrum of 3ae

HRMS (EI) of 3ae
$^1$H NMR spectrum of 3af

$^{13}$C NMR spectrum of 3af
$^{19}$F NMR spectrum of 3af

HRMS (EI) of 3af
$^1$H NMR spectrum of 3ag

$^{13}$C NMR spectrum of 3ag
$^{19}$F NMR spectrum of 3ag

![F NMR spectrum of 3ag](image)

HRMS (EI) of 3ag

![HRMS (EI) of 3ag](image)
$^1$H NMR spectrum of 3gb

$^{13}$C NMR spectrum of 3gb
$^{19}$F NMR spectrum of 3gb

HRMS (EI) of 3gb
$^1$H NMR spectrum of 3hd

$^{13}$C NMR spectrum of 3hd
$^{19}$F NMR spectrum of 3hd

HRMS (EI) of 3hd
$^1$H NMR spectrum of (Z)-3ca

$^{13}$C NMR spectrum of (Z)-3ca
$^{19}$F NMR spectrum of (Z)-3ca

$^{1}$H NMR spectrum of (Z)-3ad
$^{13}$C NMR spectrum of (Z)-3ad

$^{19}$F NMR spectrum of (Z)-3ad
$^1$H NMR spectrum of (Z)-3hd

![H NMR spectrum of (Z)-3hd]

$^{13}$C NMR spectrum of (Z)-3hd

![C NMR spectrum of (Z)-3hd]
$^{19}$F NMR spectrum of (Z)-3hd