Supporting Information

Simple Photo-induced Trifluoromethylation of Aromatic Rings

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Table of Contents

1. UV-Vis Spectra and $^{19}$F NMR of Umemoto reagent II and the mixture with 1a

2. $^{19}$F NMR spectra of the radical trapping experiment with TEMPO

3. NMR spectra of products
1. UV-Vis Spectra and $^{19}$F NMR of Umemoto reagent II and the mixture with 1a

1-1. UV-Vis spectra

1-2. $^{19}$F NMR spectra
2. $^{19}$F NMR spectra of the radical trapping experiment with TEMPO

(a) $6 + $ TEMPO (1 equiv) 

(b) $6 + $ TEMPO (1 equiv) under dark 

(c) $6 + $ TEMPO (1 equiv) 

(d) $5 (0.1 mmol) TEMPO (1 equiv) 

1a (3 equiv) 

hv (375 nm) 

rt, 1 h
3. NMR spectra of products
OH

CF₃

H₅Bu

2c
$\text{NH}_2$ $\text{CF}_3$

$2d$

X: parts per Million - Fluorine19
N-CF₃
MeO

N-CF₃
MeO
X : ppm per Million - Fluorine19

2f

MeO OMe CF3
Fluorine

N
NH₂
CF₃
2g'
X : parts per Million : Fluorine19

2h

N
Ph
CF₃
S22
$\text{abundance}$

$X$ : parts per Million : Fluorine

$N$ H $\text{CF}_3$

$\text{MeO}$ $\text{NHAc}$

$2f$