Supporting Information

for

Synthesis of 7-azabicyclo[4.3.1]decane ring systems from tricarbonyl(tropone)iron via intramolecular Heck reactions

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Copies of $^1$H and $^{13}$C NMR spectra of all purified novel compounds
$^1$H NMR (400 MHz, CDCl$_3$)
\[ \begin{align*}
\text{Br} & \quad \text{Boc} \\
\text{6} & \quad \text{Fe(CO)}_3
\end{align*} \]

$^{13}$C NMR (100 MHz, CDCl$_3$)
**$^{1}$H NMR (400 MHz, CDCl$_3$)**

![NMR Spectrogram](image)
$^{13}$C NMR (100 MHz, CDCl$_3$)
HSQC (CDCl$_3$)

12

Fe(CO)$_3$

O

Boc

I

S5
Phenyl vinyl
Boc
Iron tricarbonyl

\( ^1H \text{ NMR (400 MHz, CDCl}_3 \)
$^{13}$C NMR (100 MHz, CDCl$_3$)
HSQC (CDCl$_3$)

Fe(CO)$_3$

S1
$^1$H NMR (400 MHz, CDCl$_3$)
$^{13}$C NMR (100 MHz, CDCl$_3$)

S2

Fe(CO)$_3$

S10
$^{1}$H NMR (400 MHz, CDCl$_3$)
S3

$^{13}$C NMR (100 MHz, CDCl$_3$)
\(^1\)H NMR (400 MHz, CDCl\(_3\))
\[ \text{NH}_2 \]

$^{13}$C NMR (100 MHz, CDCl$_3$)
Ph\[\text{CCH}_2\text{NHNH}_2\]

$^1$H NMR (400 MHz, CDCl$_3$)
PhCH=CHNH₂

$^{13}$C NMR (100 MHz, CDCl₃)
^1H NMR (400 MHz, CDCl\textsubscript{3})
$^{13}$C NMR (100 MHz, CDCl$_3$)
\[ \text{I} \equiv \text{NH}_2 \]

$^1\text{H NMR (400 MHz, CDCl}_3$)
$^{13}$C NMR (100 MHz, CDCl$_3$)
$^1$H NMR (400 MHz, CDCl$_3$)
$^13$C NMR (100 MHz, CDCl$_3$)

![Chemical structure](image)
$^{1}\text{H NMR (400 MHz, CDCl}_3\text{)}$
$^{13}$C NMR (100 MHz, CDCl$_3$)
$^1$H NMR (400 MHz, CDCl$_3$)
$^{13}$C NMR (100 MHz, CDCl$_3$)
$^{1}H$ NMR (400 MHz, CDCl$_3$)
$\text{^{13}C NMR (100 MHz, CDCl}_3$)
$^1$H NMR (400 MHz, CDCl$_3$)
$^{13}$C NMR (100 MHz, CDCl$_3$)
$^1$H NMR (400 MHz, CDCl$_3$)
$^{13}$C NMR (100 MHz, CDCl$_3$)
$^1$H NMR (400 MHz, CDCl$_3$)
$^{13}$C NMR (100 MHz, CDCl$_3$)
$^1$H NMR (400 MHz, CDCl$_3$)
$\text{\textsuperscript{13}C NMR (100 MHz, CDCl}_3$}
$^{1}$H NMR (400 MHz, CDCl$_3$)
$^{13}$C NMR (100 MHz, CDCl$_3$)
$^1$H NMR (400 MHz, CDCl$_3$)
$^{13}$C NMR (100 MHz, CDCl$_3$)
$^1$H-$^1$H COSY (CDCl$_3$)

18

19
$^{1}H$-$^{13}C$ HSQC (CDCl$_3$)