1H NMR (600 MHz, CDCl₃) of 9aa
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$CNMR (150 MHz, CDCl$_3$) of 9aa

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9ab
**Supporting Information (Tani, Uehara, Yamaguchi, Itami)**

**Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings**

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9ab

```
\[ \text{Me} \quad \begin{array}{c}
\text{N} \\
\text{S} \\
\end{array} \quad \begin{array}{c}
\text{S} \\
\text{Me} \\
\end{array} \quad \text{Ph} \]
```

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9ag
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9ag
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9ah

![NMR Spectrum](image-url)
$\text{Supporting Information (Tani, Uehara, Yamaguchi, Itami)}$

$\text{Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings}$

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9ah

$$\text{Electronic Supplementary Material (ESI) for Chemical Science}$$

This journal is © The Royal Society of Chemistry 2013
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9ak
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

13C NMR (150 MHz, CDCl3) of 9ak

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9an

![NMR spectrum of 9an](image_url)
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9an
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9ba
**Supporting Information (Tani, Uehara, Yamaguchi, Itami)**

**Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings**

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9ba

![NMR spectrum](image-url)
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^\text{1}H$ NMR (600 MHz, CDCl$_3$) of 9bg

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9bg

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9bh
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Aryltriazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9bh
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9bj
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9bj
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9bo

![NMR spectrum diagram](image-url)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9bo

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9bq

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9bq

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9eg

![NMR Spectrum](image-url)
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arythiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9eg

![NMR spectrum image]
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9ga

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9ga
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9gb

![NMR spectrum of 9gb](image-url)
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9gb

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
$^1$H NMR (600 MHz, CDCl$\textsubscript{3}$) of 9gh
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9gh
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9gk
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9gk


Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9gu
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

\[ \text{NMR (150 MHz, CDCl}_3\text{)} \text{ of 9gu} \]

\[ \text{13C NMR (150 MHz, CDCl}_3\text{)} \text{ of 9gu} \]
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9hg
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9hg
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9ja

![NMR spectrum of 9ja](image-url)
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9ja

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9jb

![NMR spectrum of 9jb](image)
$^{13}$C NMR (150 MHz, CDCl$_3$) of 9jb
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9ka
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9ka
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9kg

![NMR spectrum of 9kg](image)
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9kg
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9kn

![NMR Spectrum](image-url)
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9kn

![NMR Spectrogram](image-url)
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9nj

![NMR spectrum of 9nj](image)

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
$^{13}$C NMR (150 MHz, CDCl$_3$) of 9nj
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9oe
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9oe
Supporting Information (Tani, Uehara, Yamaguchi, Itami)

Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9qa

Electronic Supplementary Material (ESI) for Chemical Science
This journal is © The Royal Society of Chemistry 2013
$^{13}$C NMR (150 MHz, CDCl$_3$) of 9qa
1H NMR (600 MHz, CDCl₃) of 9ua
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9ua

Diagram of $^{13}$C NMR spectrum with peaks labeled.
Supporting Information (Tani, Uehara, Yamaguchi, Itami)
Programmed Synthesis of Aryltiazoles through Sequential C–H Couplings

$^1$H NMR (600 MHz, CDCl$_3$) of 9vb

![NMR Spectrum](image)
Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings

$^{13}$C NMR (150 MHz, CDCl$_3$) of 9vb