

Supplementary data

Activation of a sweet taste receptor by oleanane-type glycosides from *Wisteria sinensis*

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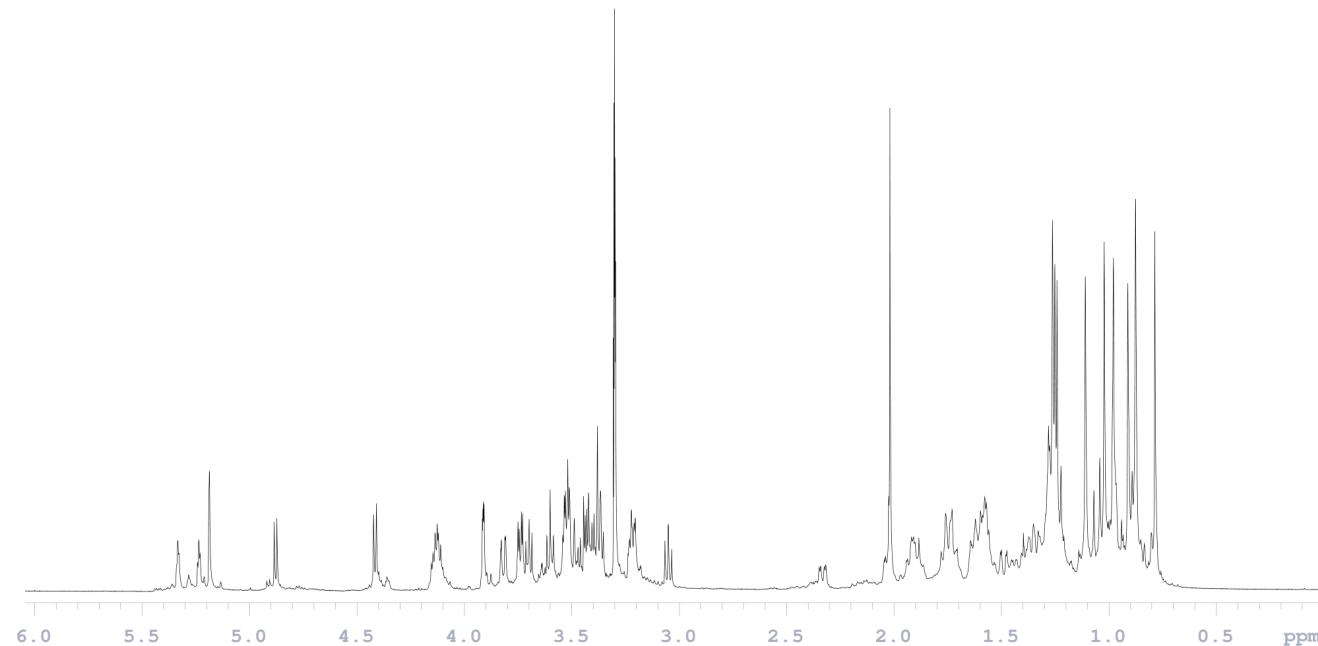
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Compound 1

Sample Name **WSR2211I3**
Date collected **2021-05-11** Pulse sequence **PRESAT**
Solvent **cd3od** Temperature **27**
Spectrometer **Agilent-NMR-inova600** Study owner **npchem**
Operator **npchem**



Data file exp

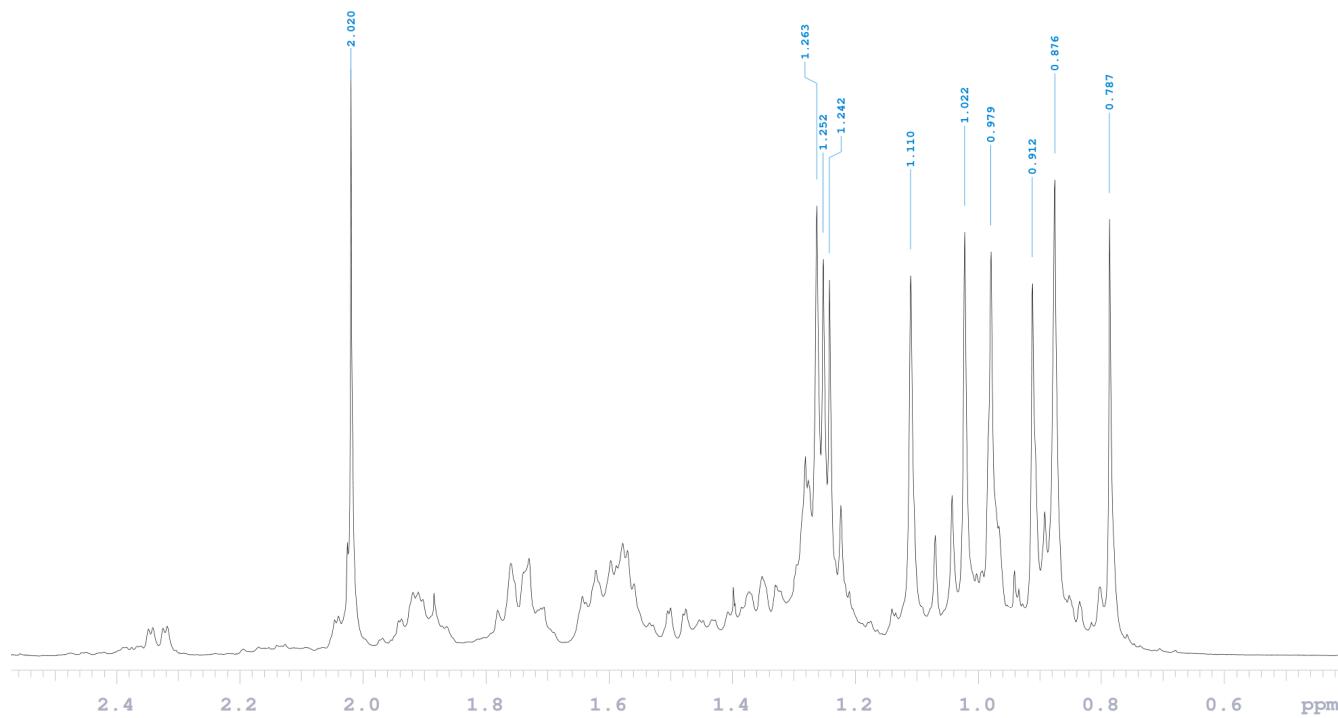
Plot date 2021-05-11

Figure S1 - ¹H spectrum of compound 1



Compound 1

Sample Name	WSR2211t3	Pulse sequence	PRESAT	Temperature	27	Study owner	npchem
Date collected	2021-05-11	Solvent	cd3od	Spectrometer	Agilent-NMR-inova600	Operator	npchem



Data file exp

Plot date 2021-05-11

Figure S2 - ¹H spectrum of compound 1 zoomed-in (a)



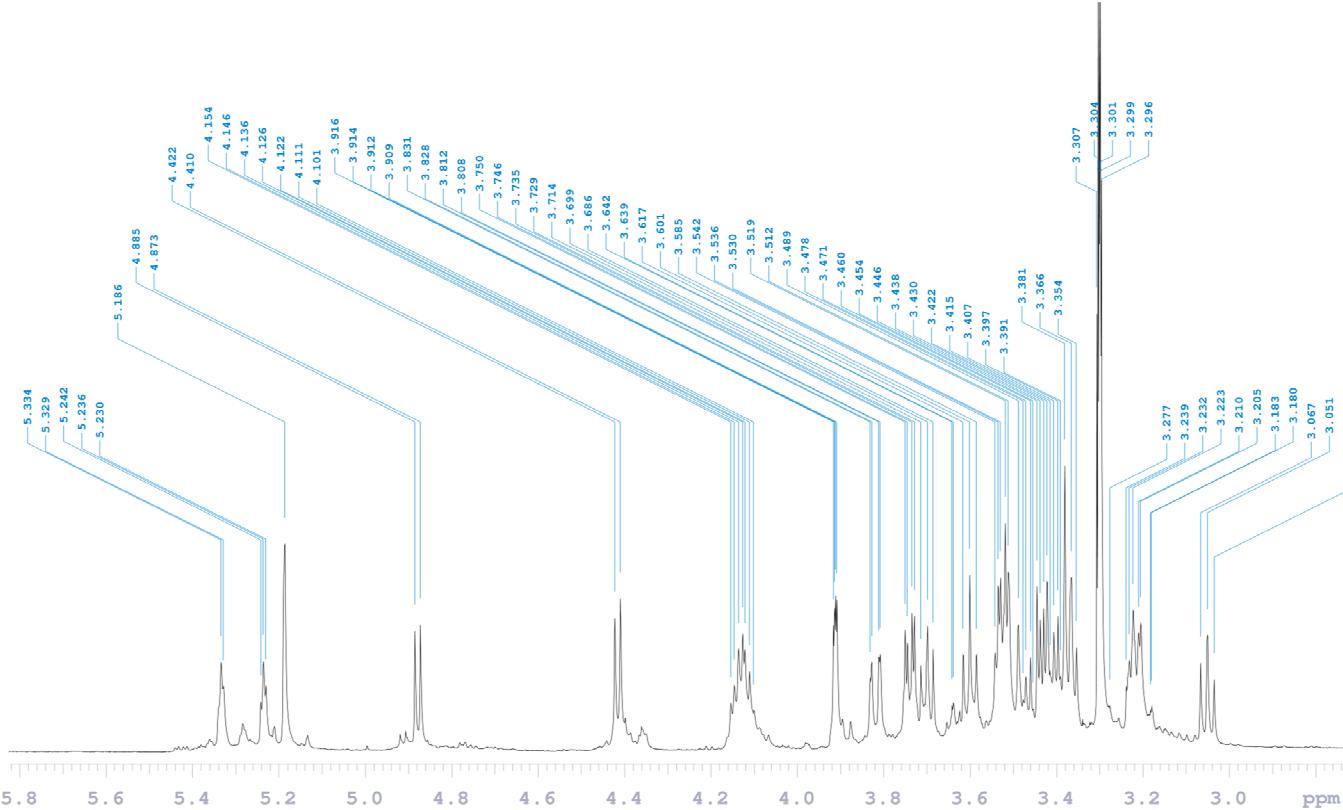
Compound 1

Sample Name **WSR2211I3**
Date collected **2021-05-11**

Pulse sequence **PRESAT**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

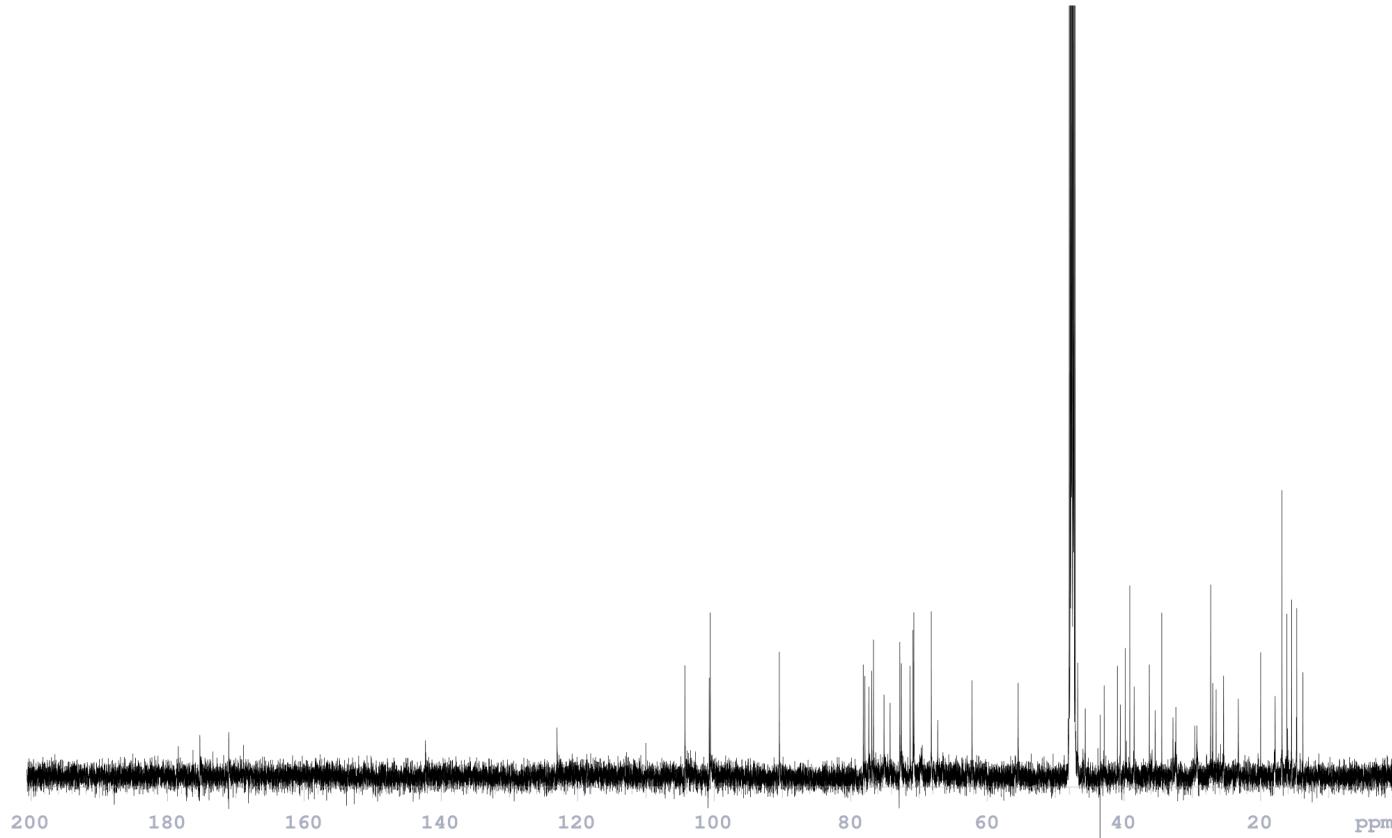
Plot date 2021-05-11

Figure S3 - ¹H spectrum of compound 1 zoomed-in (b)



Compound 1

Sample Name	WSR221113	Pulse sequence	CARBON	Temperature	27	Study owner	npchem
Date collected	2021-05-11	Solvent	cd3od	Spectrometer	Agilent-NMR-Inova600	Operator	npchem



Data file exp

Plot date 2021-05-12

Figure S4 - ¹³C spectrum of compound 1



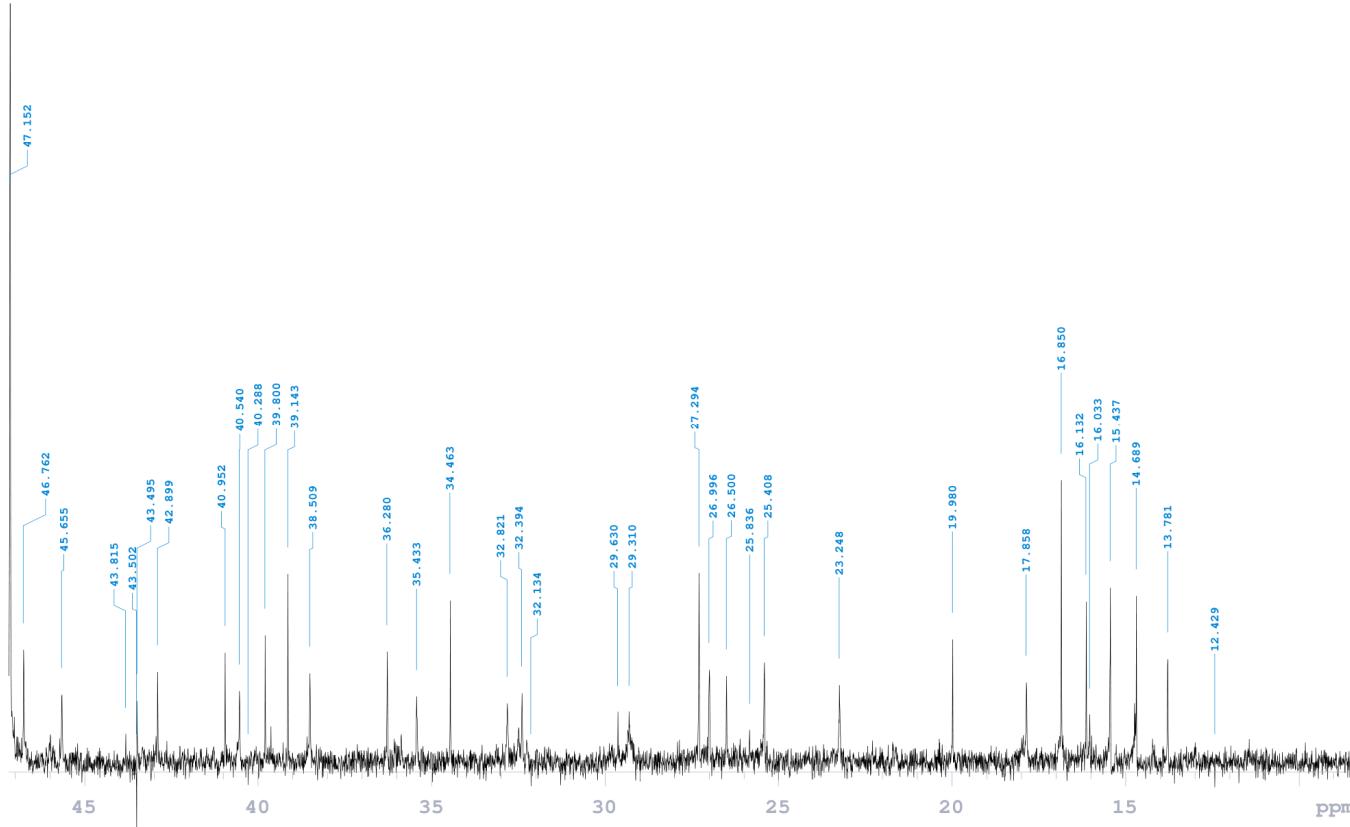
Compound 1

Sample Name **WSR221113**
Date collected **2021-05-11**

Pulse sequence **CARBON**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-Inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-05-12

Figure S5 - ¹³C spectrum of compound 1 zoomed-in (a)



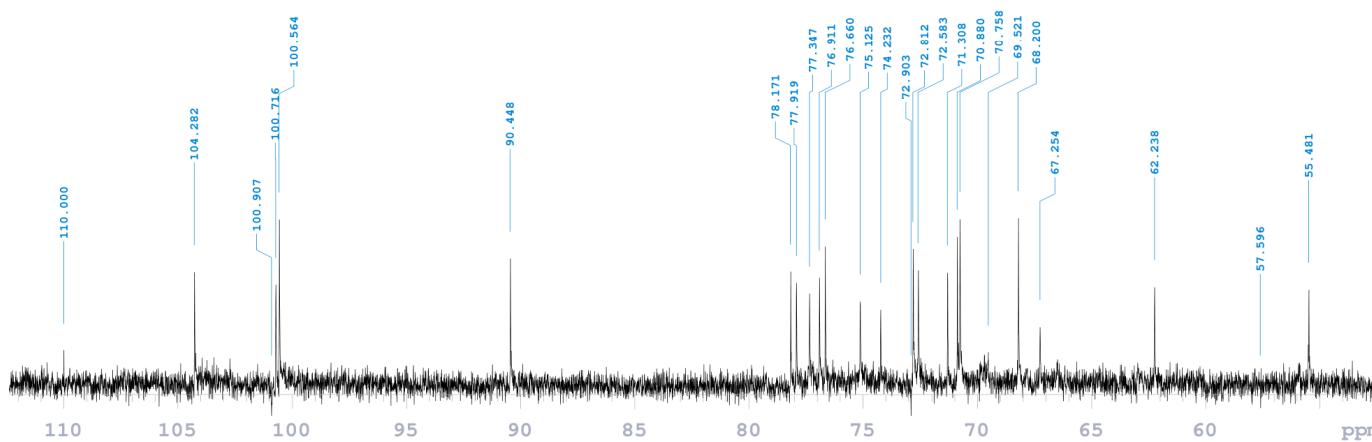
Compound 1

Sample Name **WSR221113**
Date collected **2021-05-11**

Pulse sequence **CARBON**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

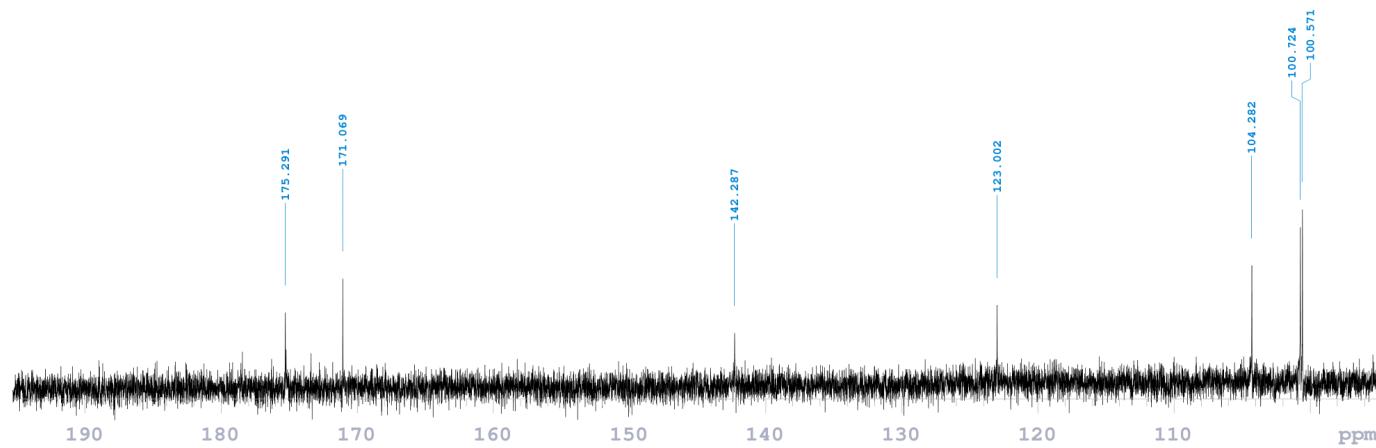
Plot date 2021-05-12

Figure S6 - ¹³C spectrum of compound 1 zoomed-in (b)



Compound 1

Sample Name	WSR221113	Pulse sequence	CARBON	Temperature	27	Study owner	npchem
Date collected	2021-05-11	Solvent	cd3od	Spectrometer	Agilent-NMR-inova600	Operator	npchem



Data file exp

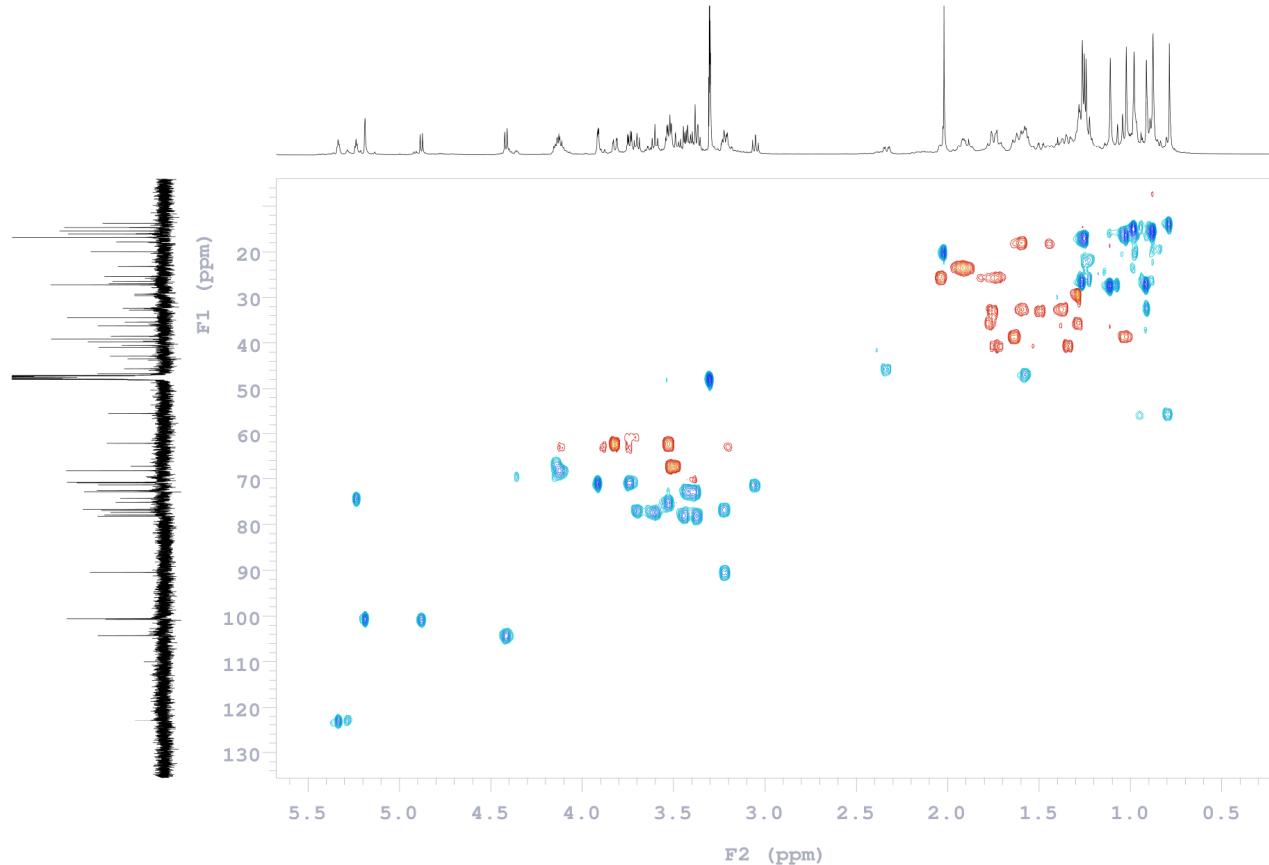
Plot date 2021-05-12

Figure S7 - ¹³C spectrum of compound 1 zoomed-in (c)



Compound 1

Sample Name **WSR221113**
Date collected **2021-05-11** Pulse sequence **gHSQCAD**
Solvent **cd3od** Temperature **27**
Spectrometer **Agilent-NMR-inova600** Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-05-12

Figure S8 - HSQC spectrum of compound 1



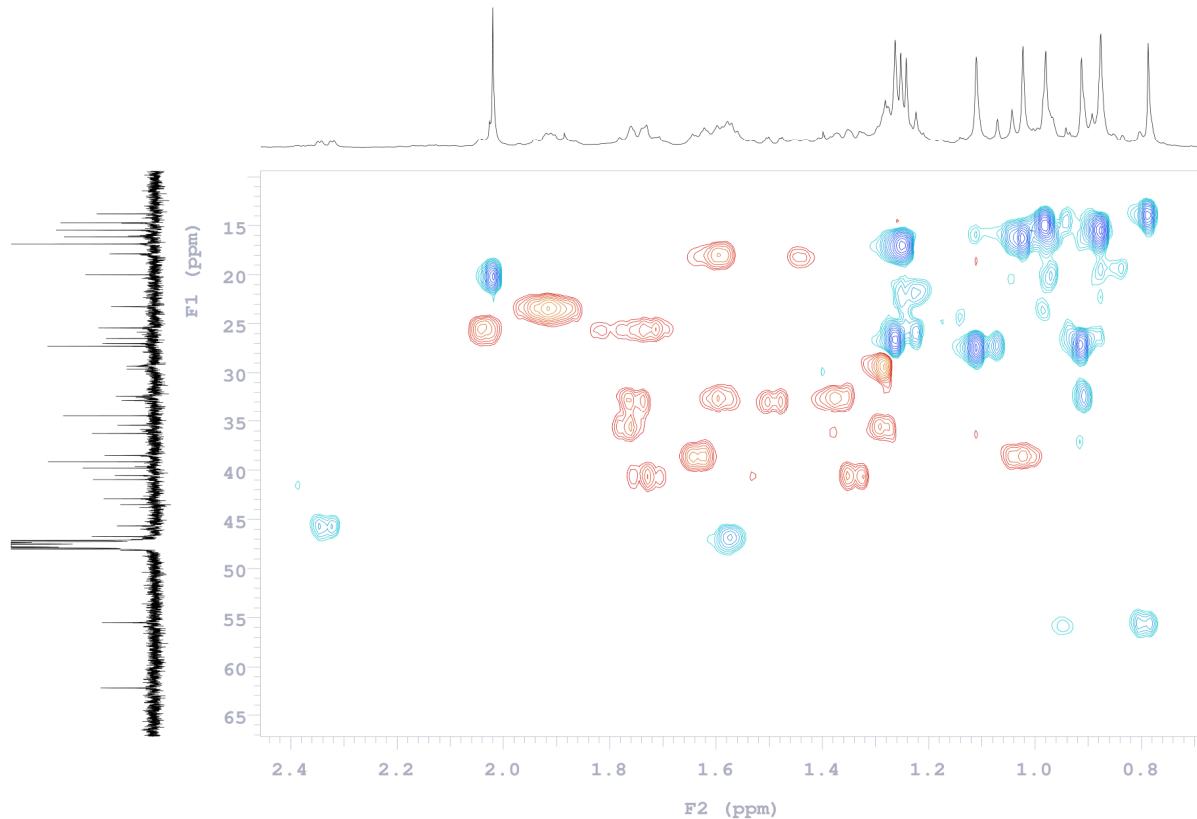
Compound 1

Sample Name **WSR2211i3**
Date collected **2021-05-11**

Pulse sequence **gHSQCAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

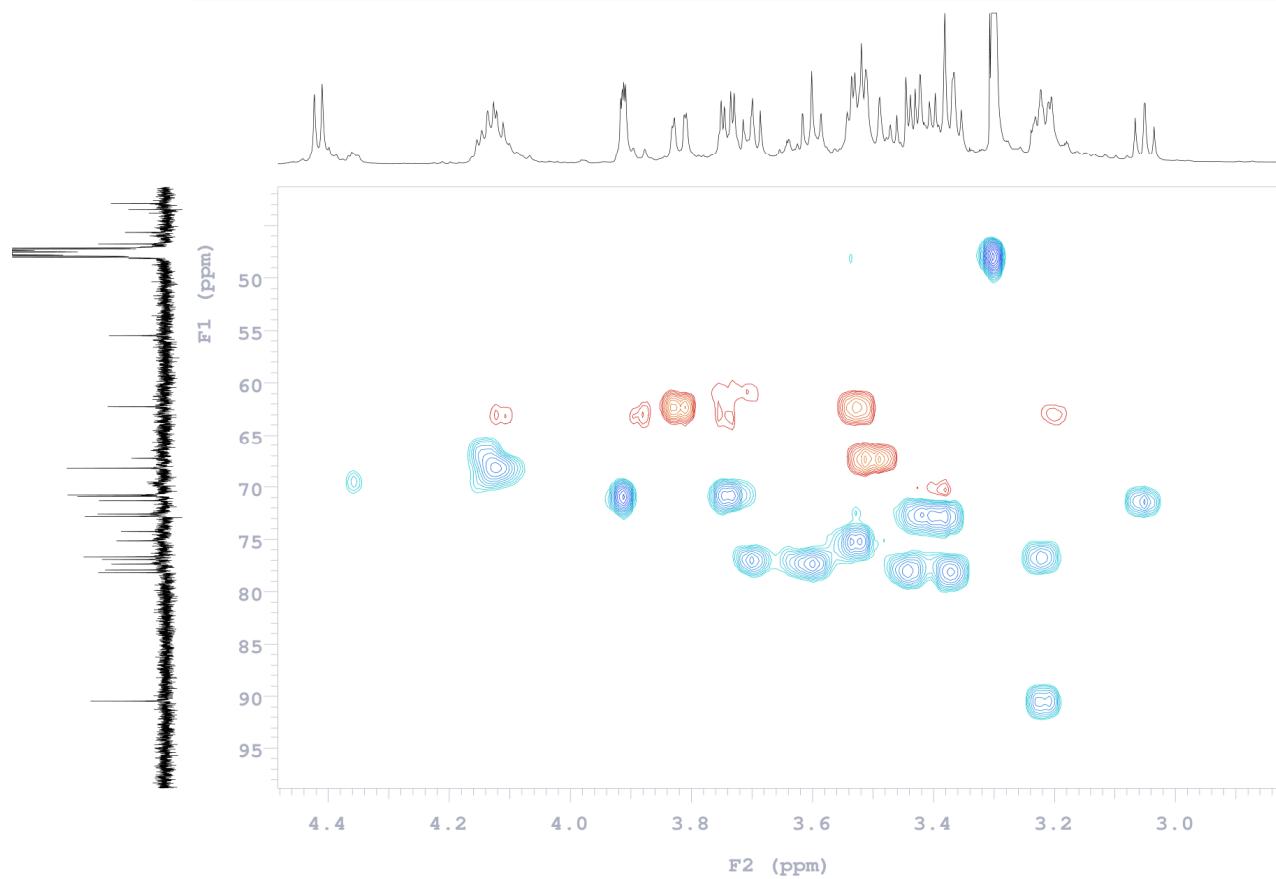
Plot date 2021-05-12

Figure S9 - HSQC spectrum of compound 1 zoomed-in (a)



Compound 1

Sample Name **WSR22113**
Date collected **2021-05-11** Pulse sequence **gHSQCAD**
Solvent **cd3od** Temperature **27**
Spectrometer **Agilent-NMR-inova600** Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-05-12

Figure S10 - HSQC spectrum of compound 1 zoomed-in (b)



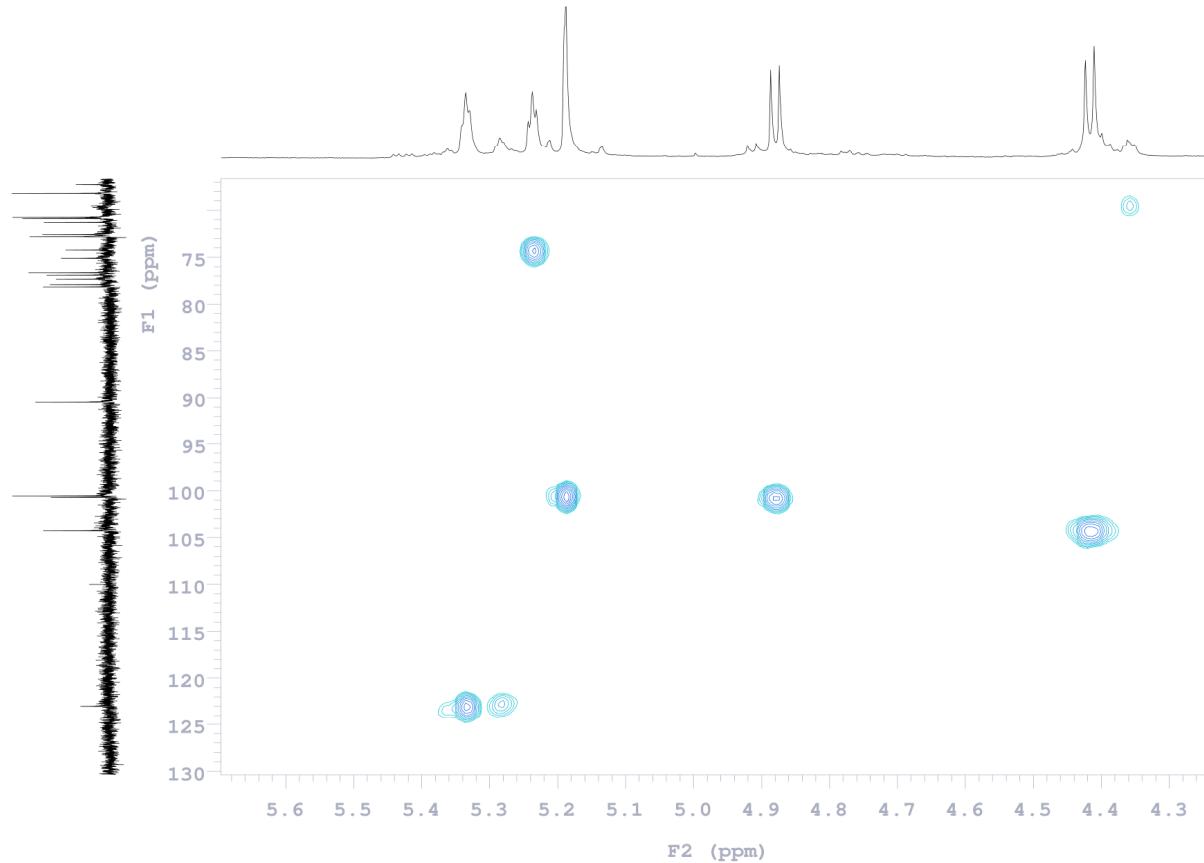
Compound 1

Sample Name **WSR22113**
Date collected **2021-05-11**

Pulse sequence **gHSQCAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

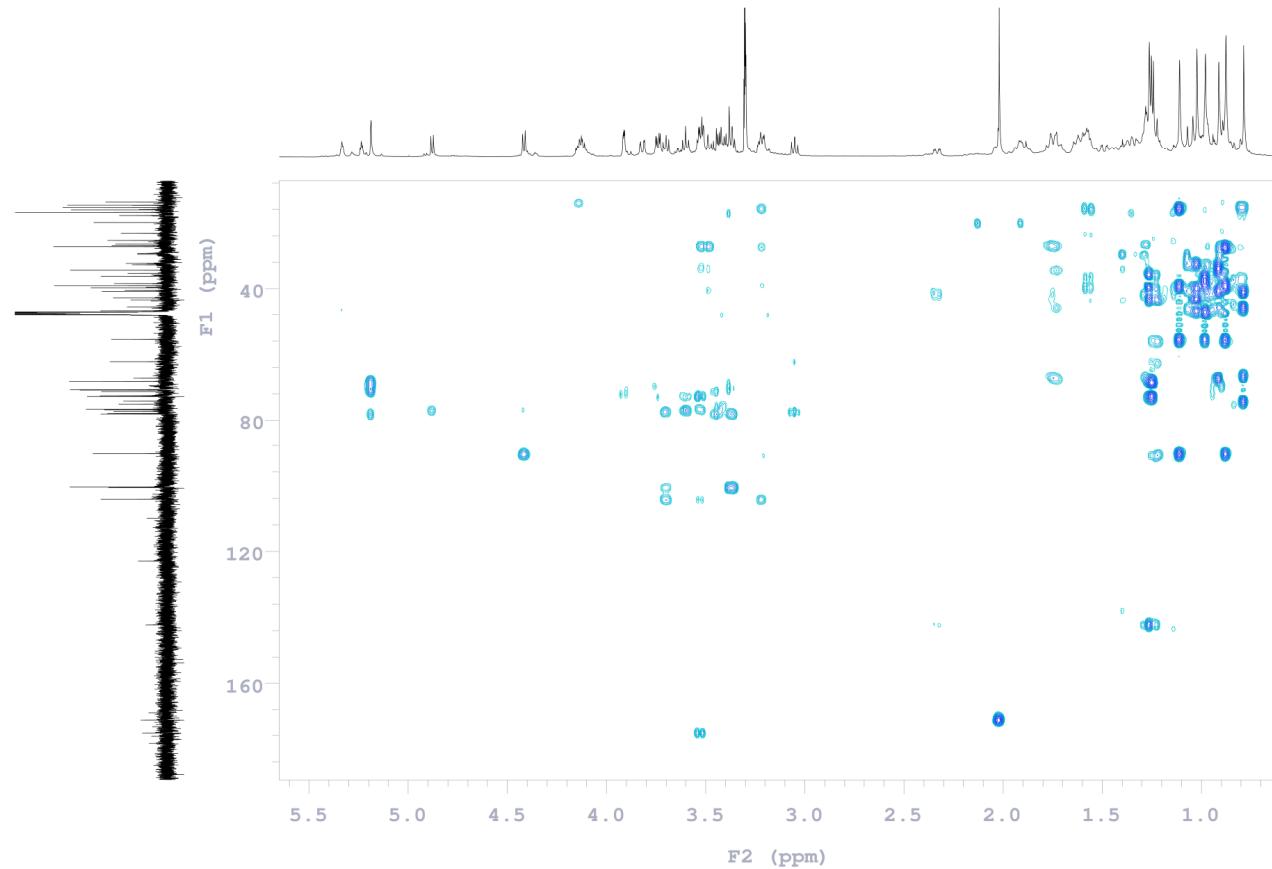
Plot date 2021-05-12

Figure S11 - HSQC spectrum of compound 1 zoomed-in (c)



Compound 1

Sample Name **WSR221113**
Date collected **2021-05-11** Pulse sequence **gHMBCAD**
Solvent **cd3od** Temperature **27**
Spectrometer **Agilent-NMR-inova600** Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-05-12

Figure S12 - HMBC spectrum of compound-in 1



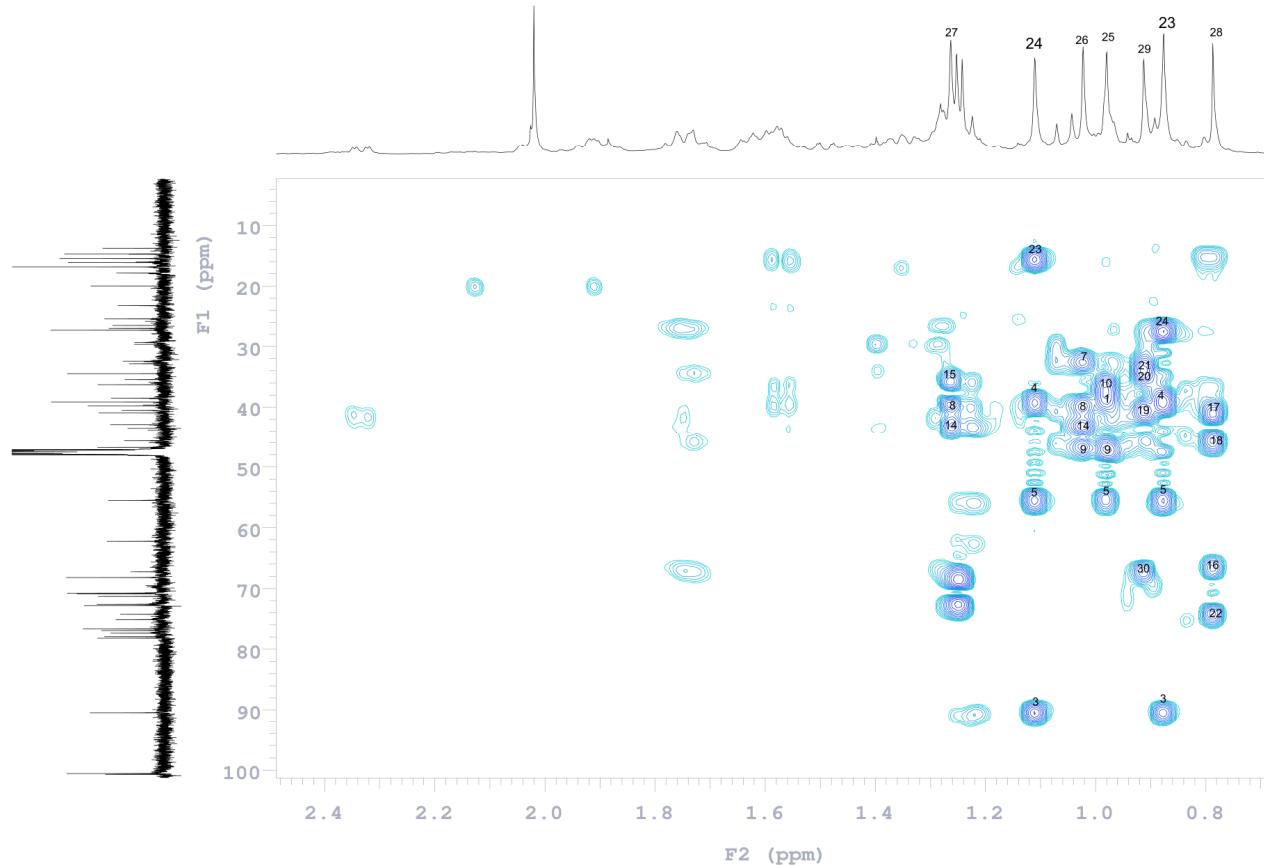
Compound 1

Sample Name **WSR221113**
Date collected **2021-05-11**

Pulse sequence **gHMBCAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-05-12

Figure S13 - HMBC spectrum of compound 1 zoomed-in



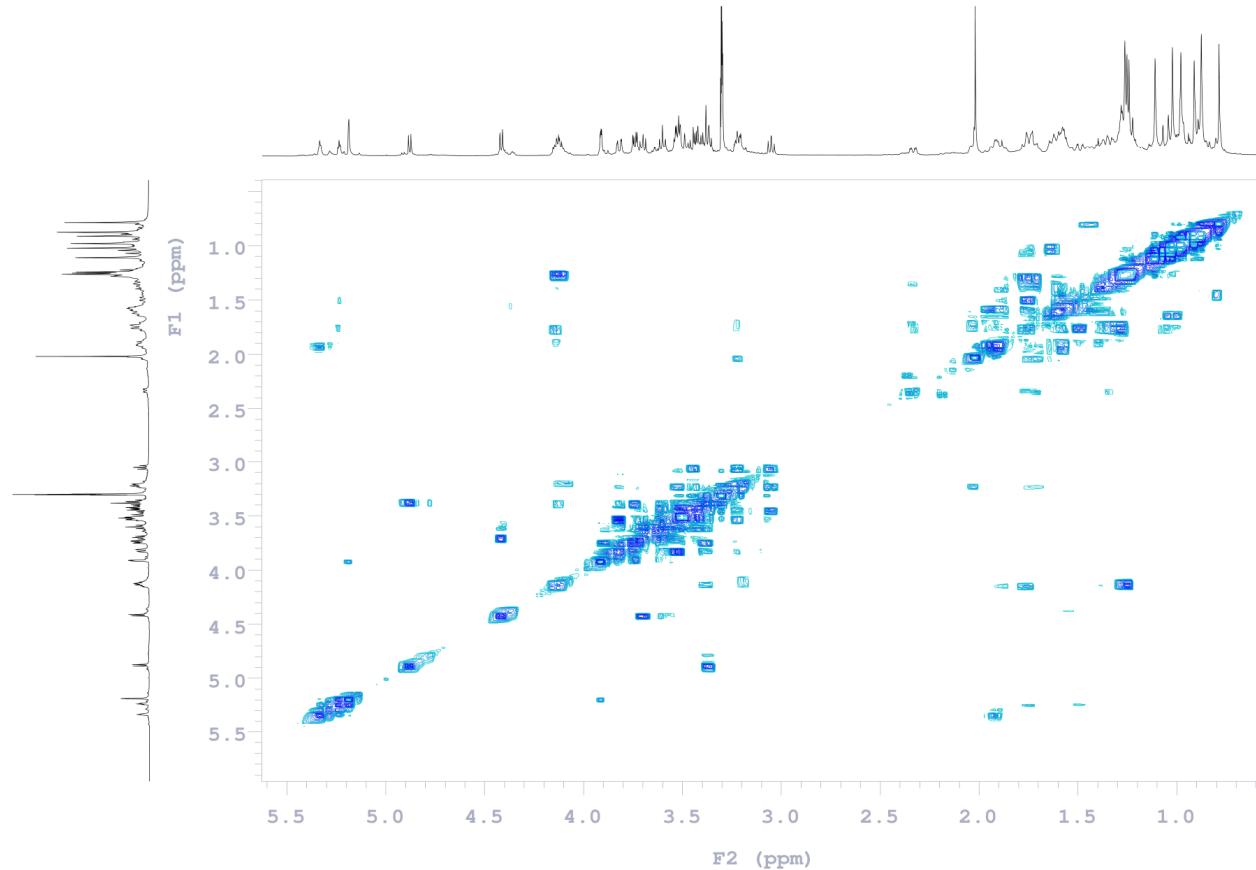
Compound 1

Sample Name **WSR221113**
Date collected **2021-05-11**

Pulse sequence **gCOSY**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

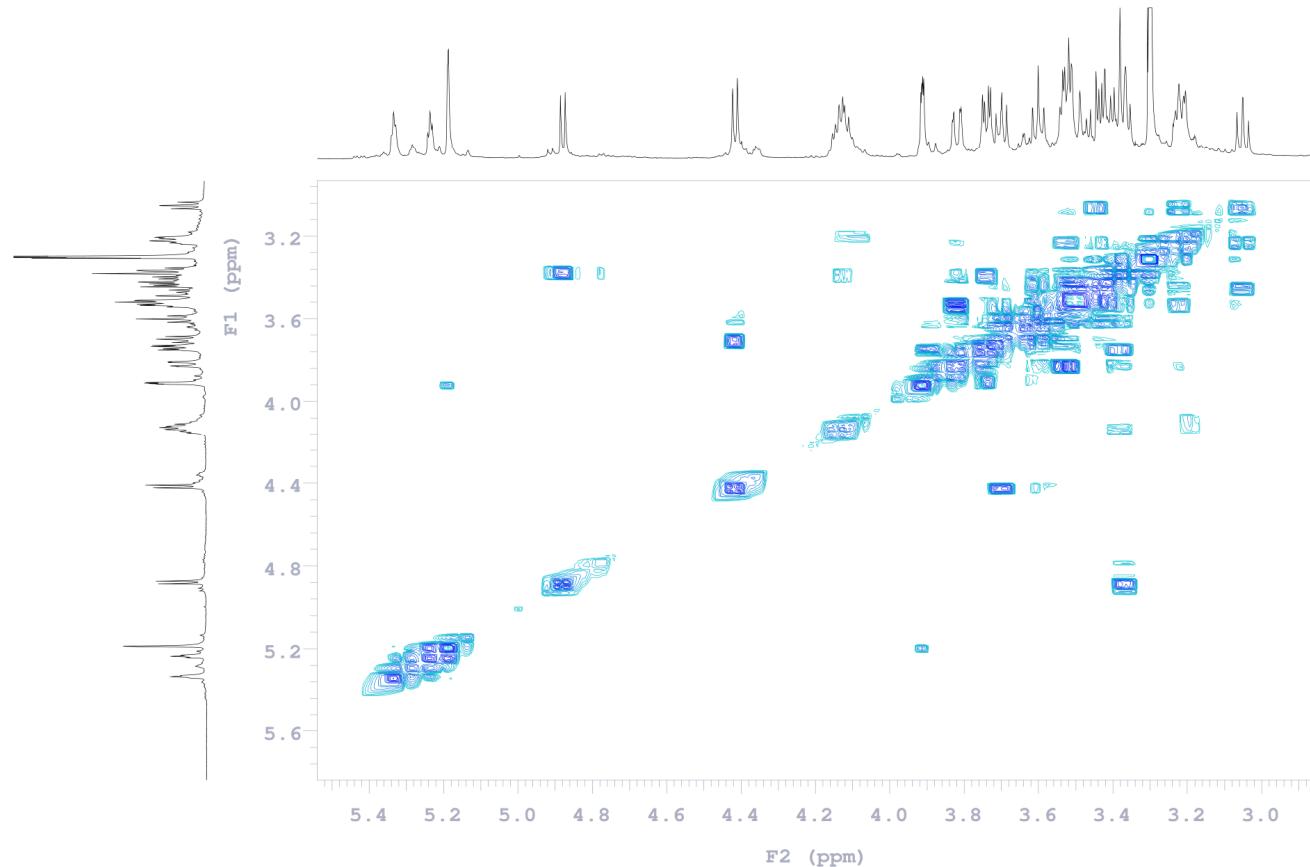
Plot date 2021-05-11

Figure S14 - COSY spectrum of compound 1



Compound 1

Sample Name **WSR221113**
Date collected **2021-05-11** Pulse sequence **gCOSY**
Solvent **cd3od** Temperature **27**
Spectrometer **Agilent-NMR-inova600** Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-05-11

Figure S15 - COSY spectrum of compound 1 zoomed-in (a)



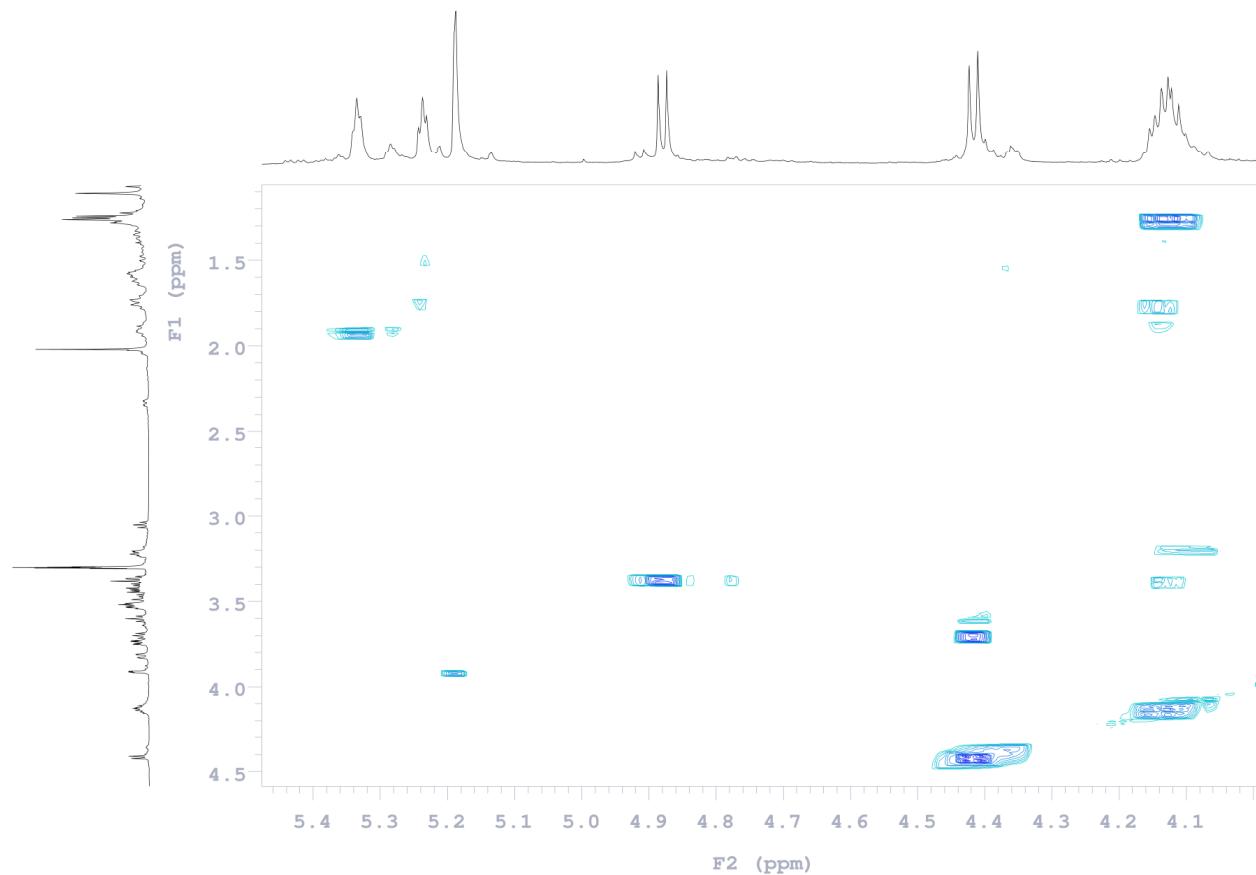
Compound 1

Sample Name **WSR221113**
Date collected **2021-05-11**

Pulse sequence **gCOSY**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-05-11

Figure S16 - COSY spectrum of compound 1 zoomed-in (b)



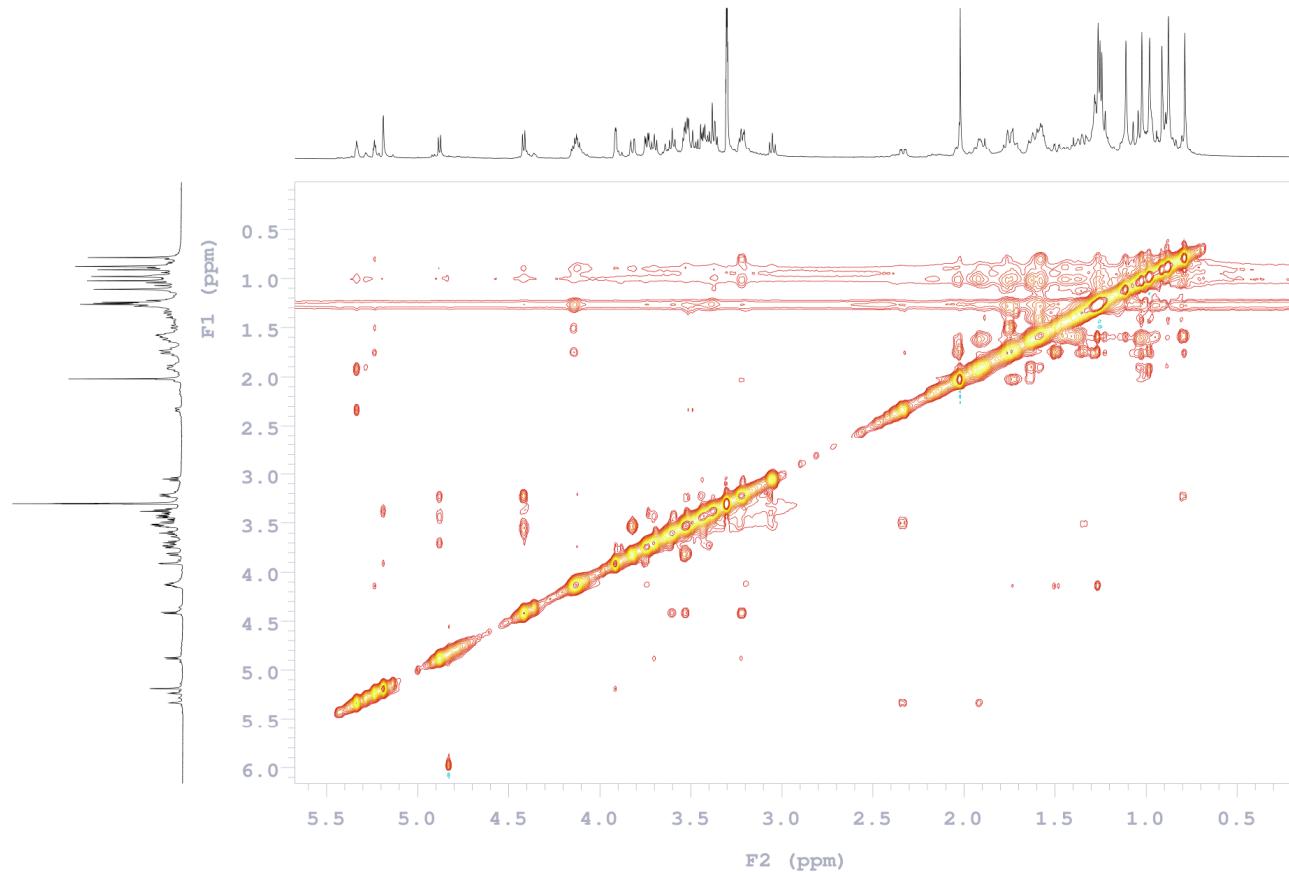
Compound 1

Sample Name **WSR22113r**
Date collected **2021-05-18**

Pulse sequence **ROESYAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-05-18

Figure S17 - ROESY spectrum of compound 1



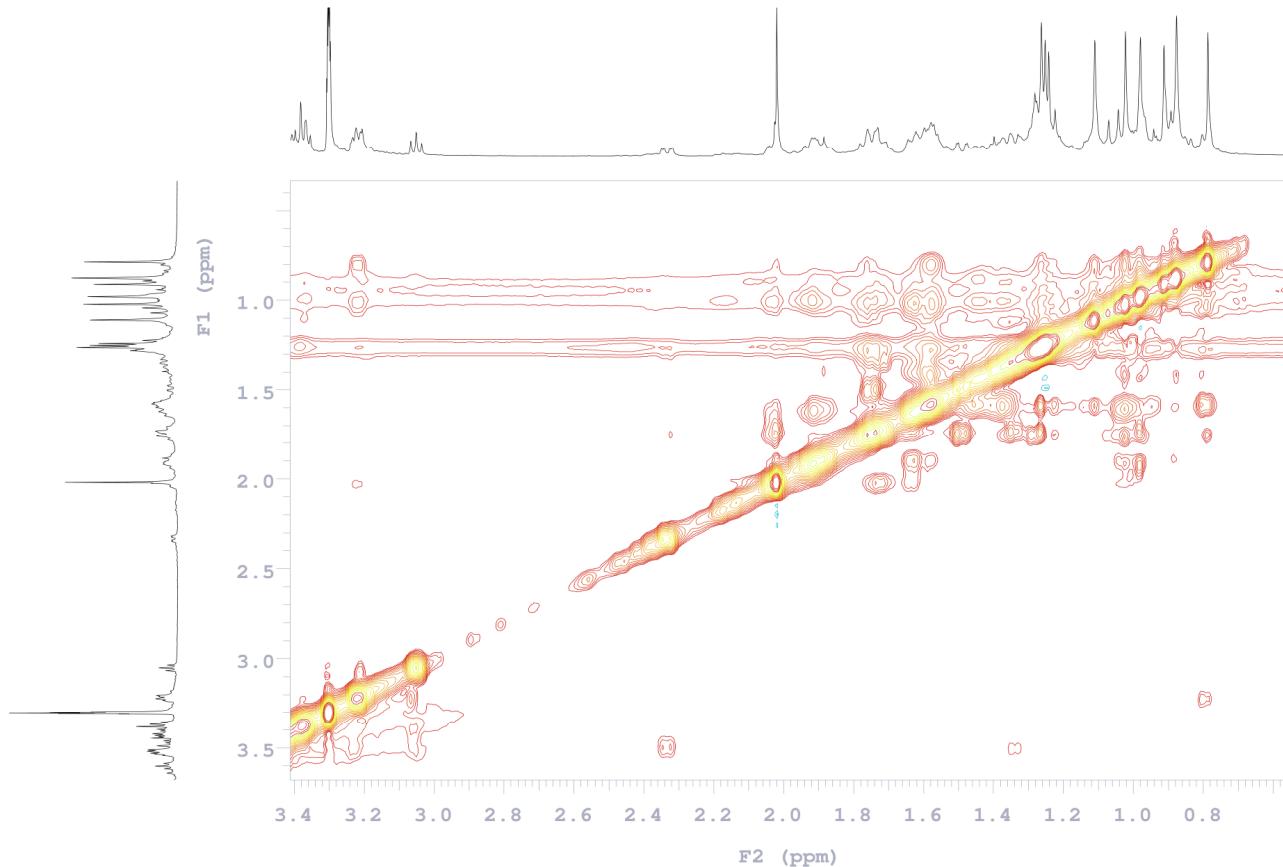
Compound 1

Sample Name **WSR221113r**
Date collected **2021-05-18**

Pulse sequence **ROESYAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-05-18

Figure S18 - ROESY spectrum of compound 1 zoomed-in (a)



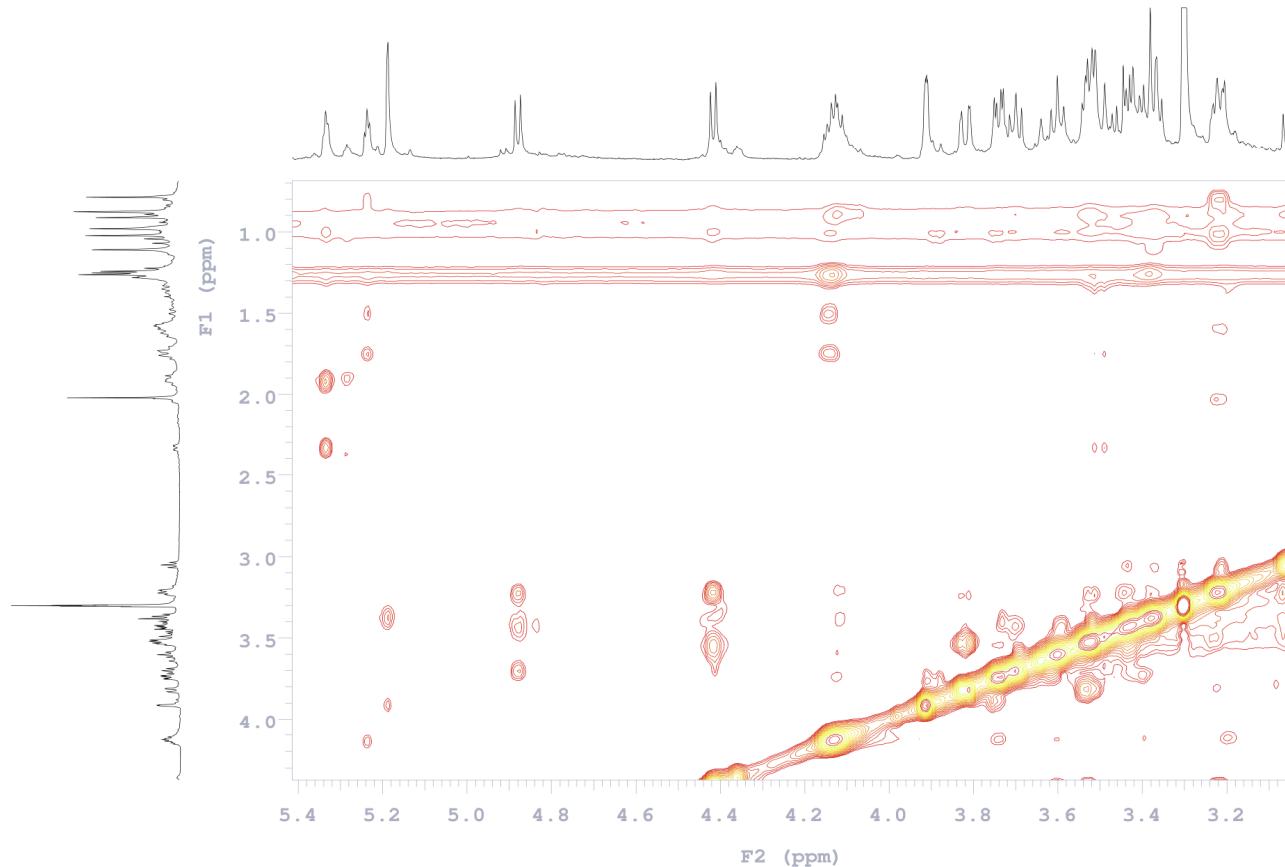
Compound 1

Sample Name **WSR221113r**
Date collected **2021-05-18**

Pulse sequence **ROESYAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



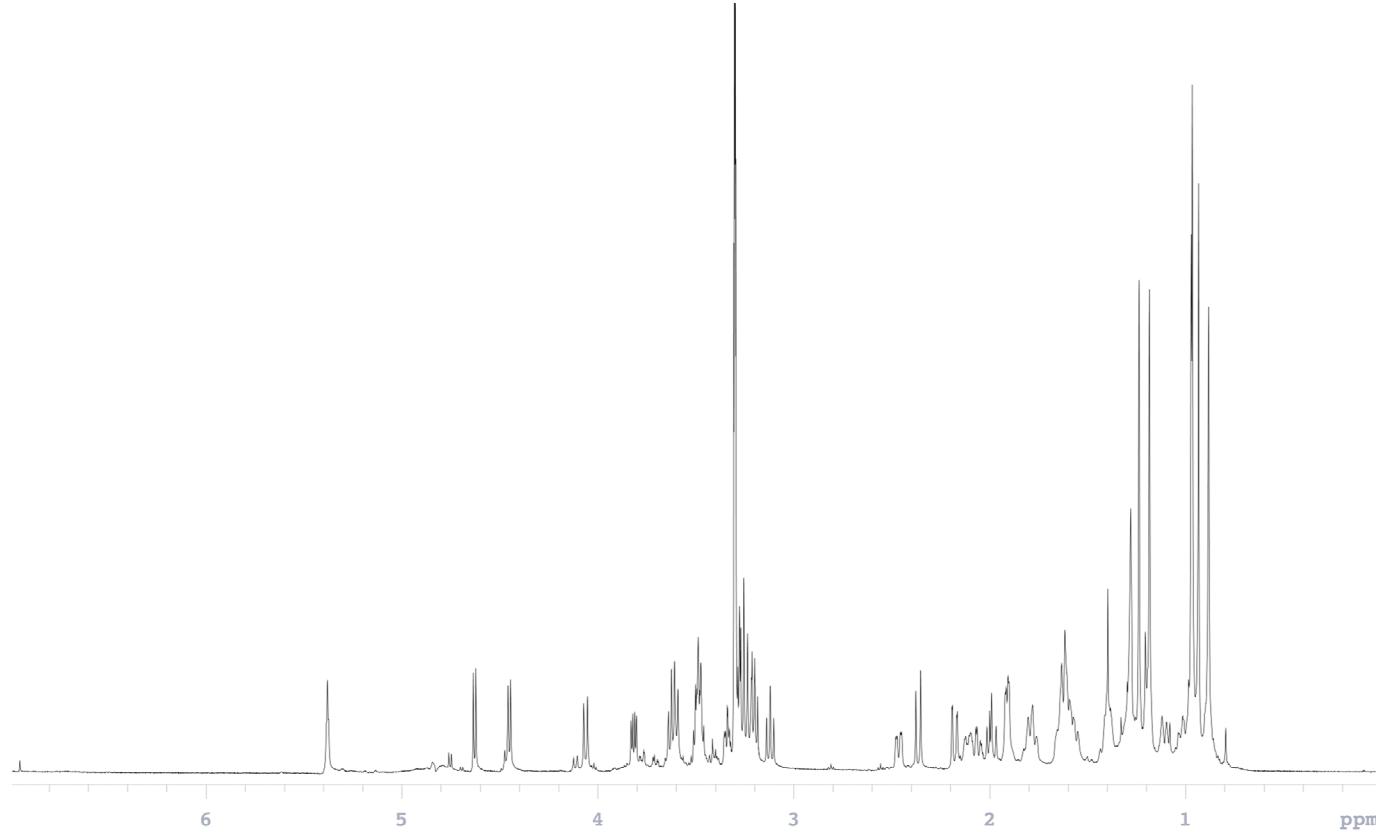
Data file exp

Plot date 2021-05-18

Figure S19 - ROESY spectrum of compound 1 zoomed-in (b)

**Compound 2**

Sample Name **WSR224b**
Date collected **2021-02-24** Pulse sequence **PRESAT**
Solvent **cd3od** Temperature **27**
Spectrometer **Agilent-NMR-Inova600** Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-24

Figure S20 - ¹H spectrum of compound 2



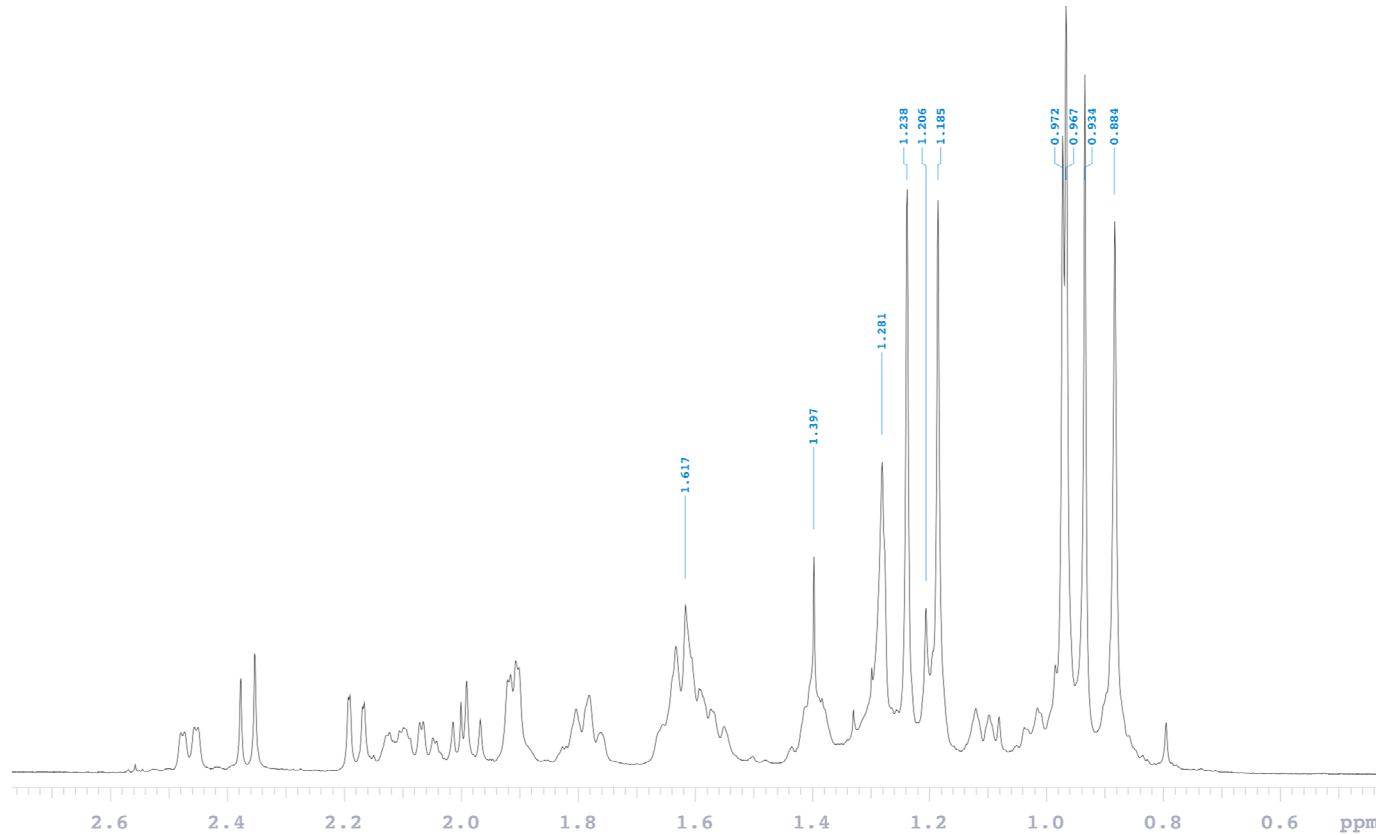
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-24**

Pulse sequence **PRESAT**
Solvent **cd3od**

Temperature 27
Spectrometer Agilent-NMR-inova600

Study owner npchem
Operator npchem



Data file exp

Plot date 2021-02-24

Figure S21 - ^1H spectrum of compound 2 zoomed-in (a)



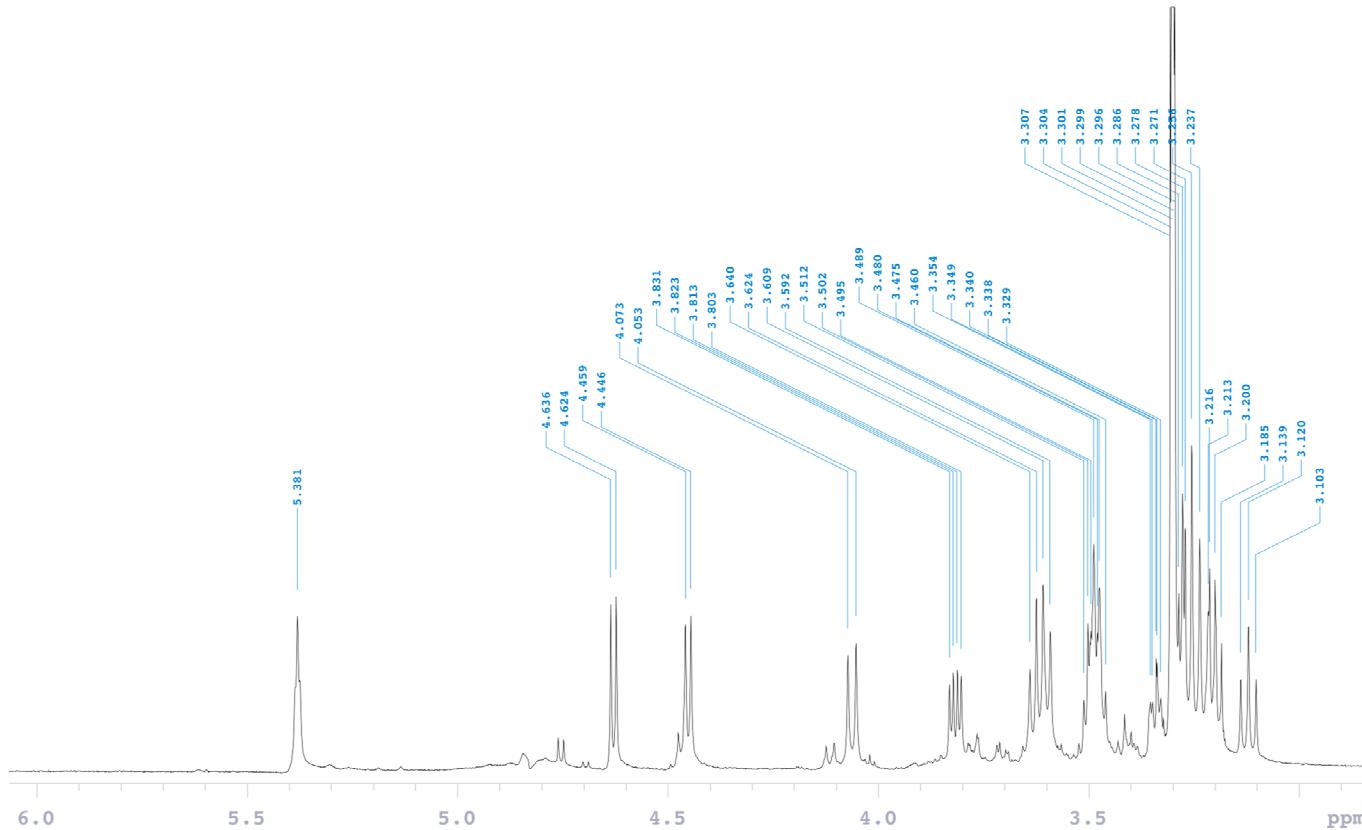
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-24**

Pulse sequence **PRESAT**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

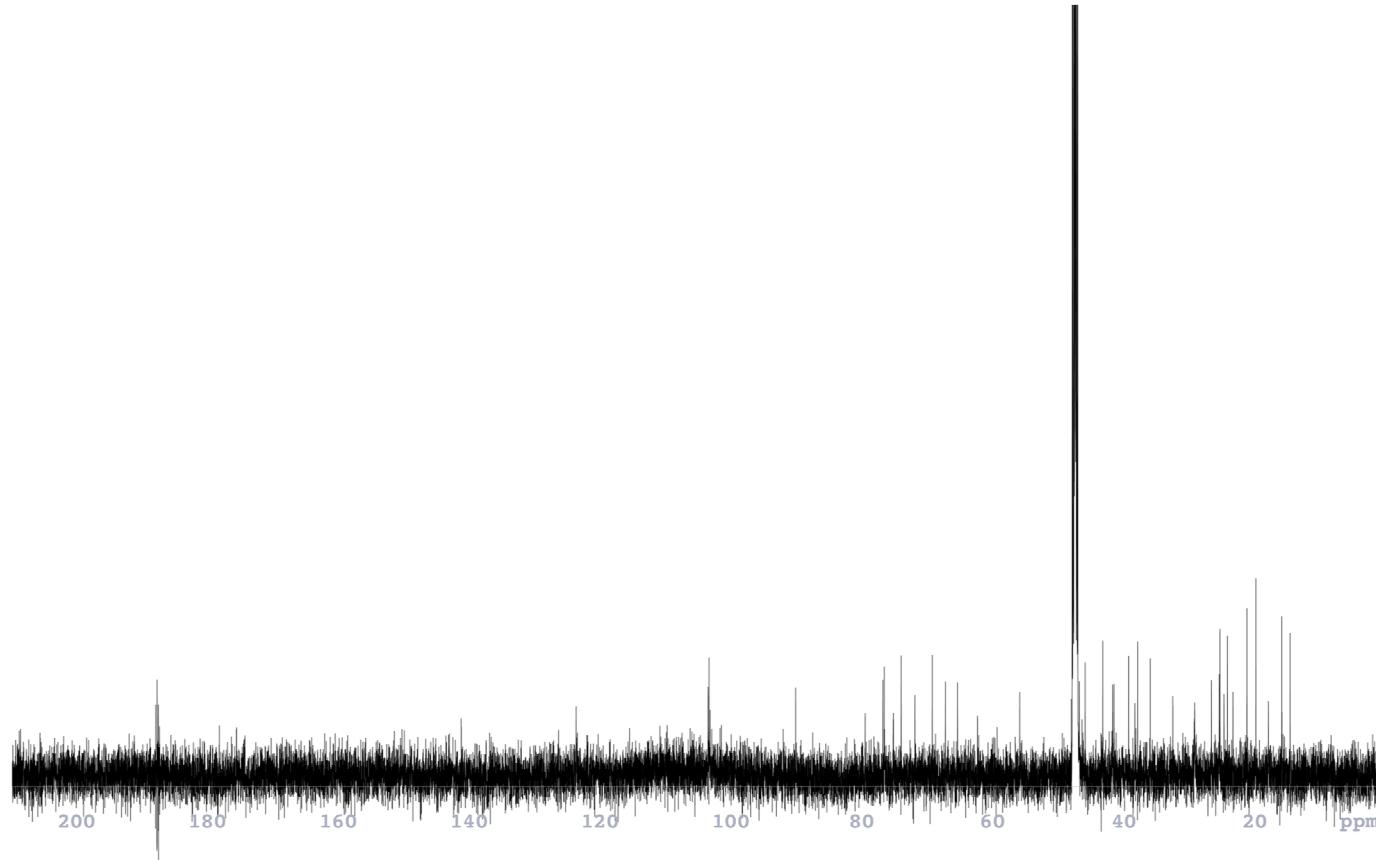
Plot date 2021-02-24

Figure S22 - ¹H spectrum of compound 2 zoomed-in (b)



Compound 2

Sample Name **WSR224b**
Date collected **2021-02-25** Pulse sequence **CARBON**
Solvent **cd3od** Temperature **27**
Spectrometer **Agilent-NMR-Inova600** Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-25

Figure S23 - ¹³C spectrum of compound 2



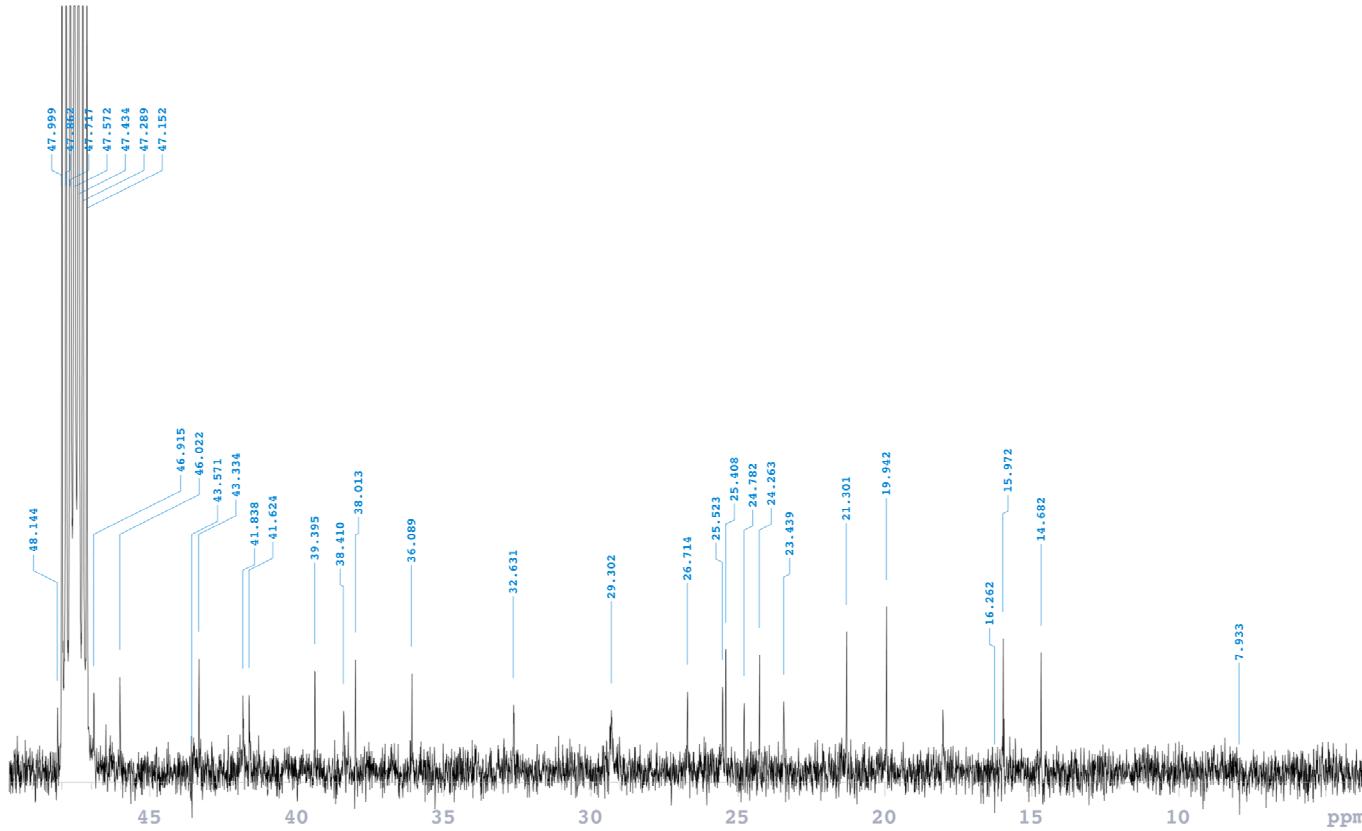
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-25**

Pulse sequence **CARBON**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

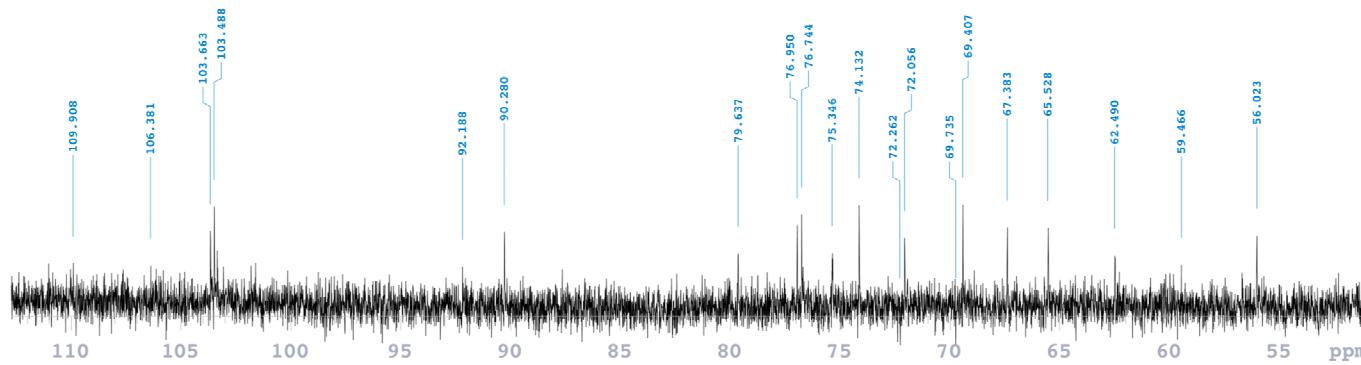
Plot date 2021-02-25

Figure S24 - ¹³C spectrum of compound 2 zoomed-in (a)



Compound 2

Sample Name	WSR224b	Pulse sequence	CARBON	Temperature	27	Study owner	npchem
Date collected	2021-02-25	Solvent	cd3od	Spectrometer	Agilent-NMR-inova600	Operator	npchem



Data file exp

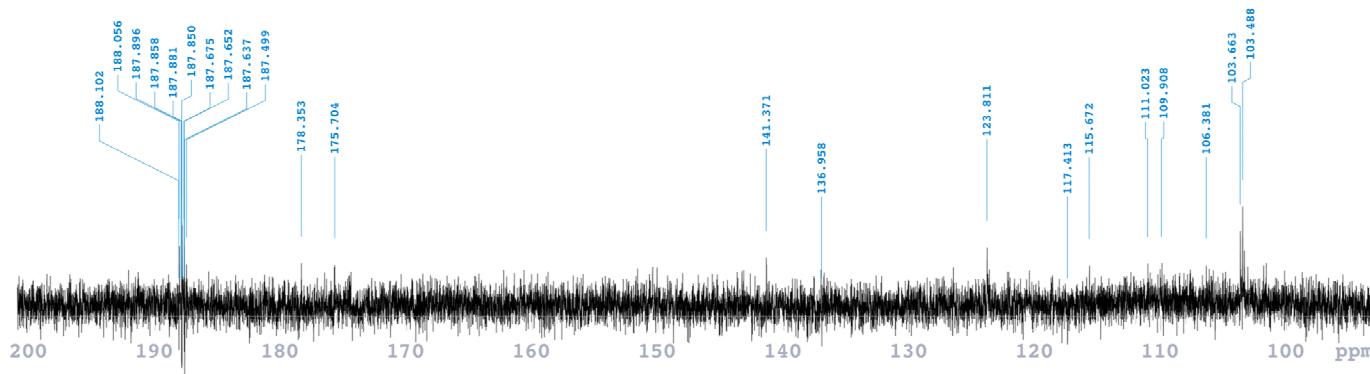
Plot date 2021-02-25

Figure S25 - ¹³C spectrum of compound 2 zoomed-in (b)



Compound 2

Sample Name	WSR224b	Pulse sequence	CARBON	Temperature	27	Study owner	npchem
Date collected	2021-02-25	Solvent	cd3od	Spectrometer	Agilent-NMR-inova600	Operator	npchem



Data file exp

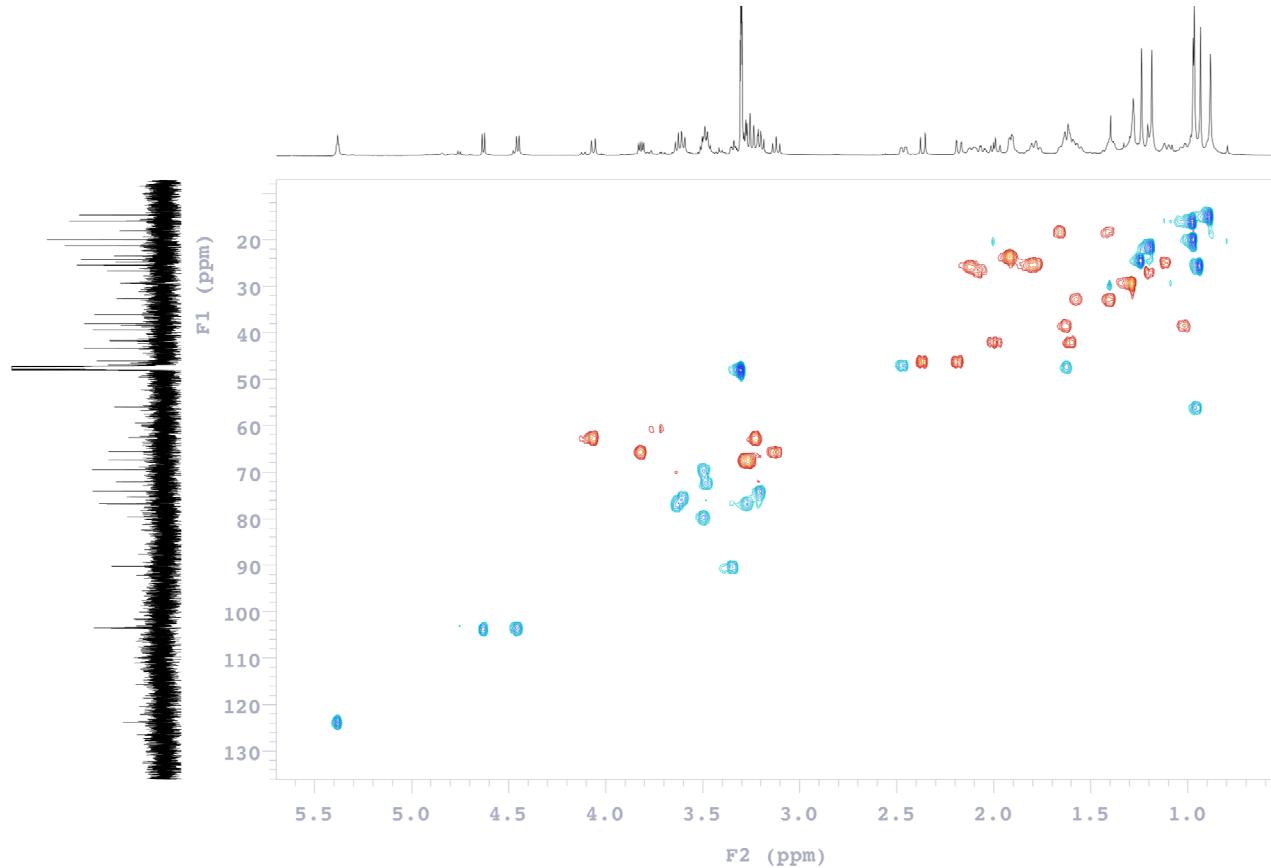
Plot date 2021-02-25

Figure S26 - ¹³C spectrum of compound 2 zoomed-in (c)



Compound 2

Sample Name **WSR224b** Pulse sequence **gHSQCAD**
Date collected **2021-02-24** Solvent **cd3od** Temperature **27**
Temperature **27** Spectrometer **Agilent-NMR-Inova600** Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-25

Figure S27 - HSQC spectrum of compound 2



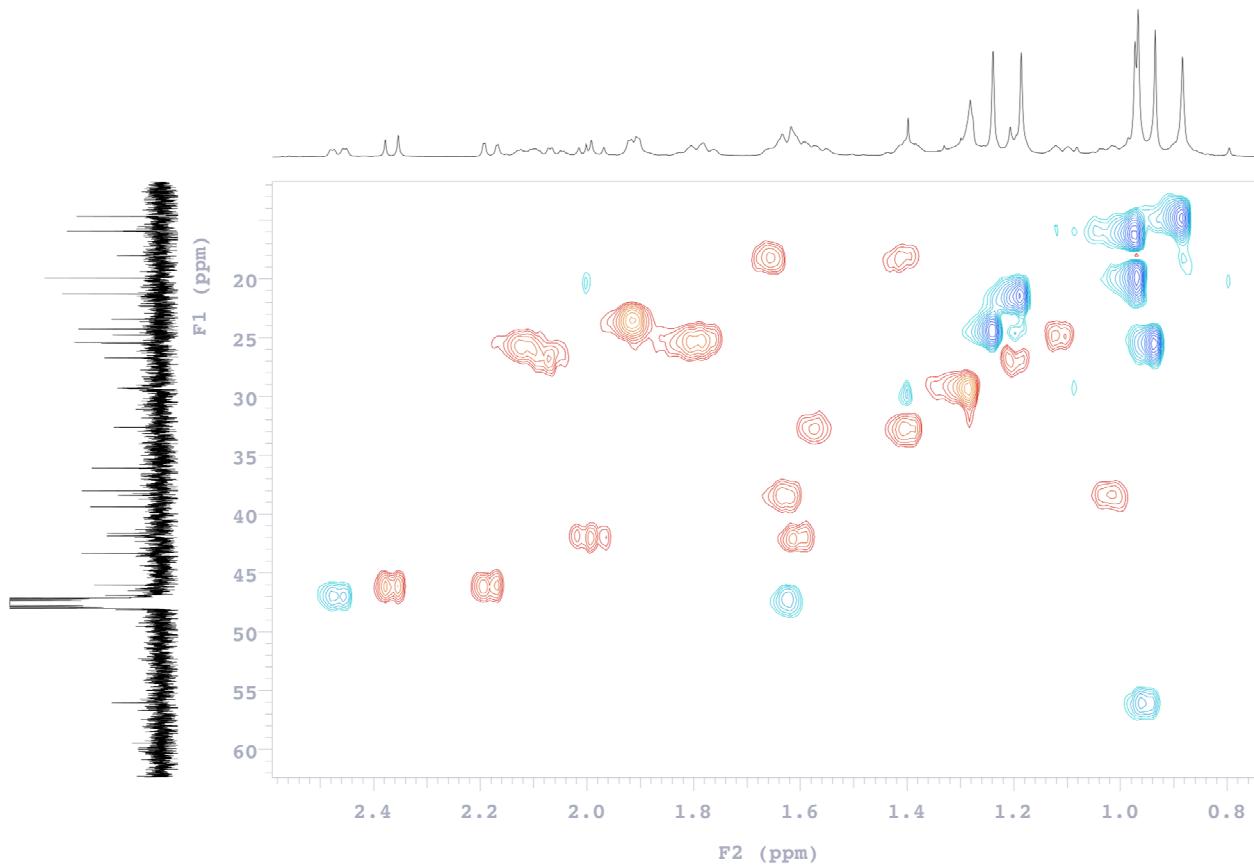
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-24**

Pulse sequence **gHSQCAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-25

Figure S28 - HSQC spectrum of compound 2 zoomed-in (a)



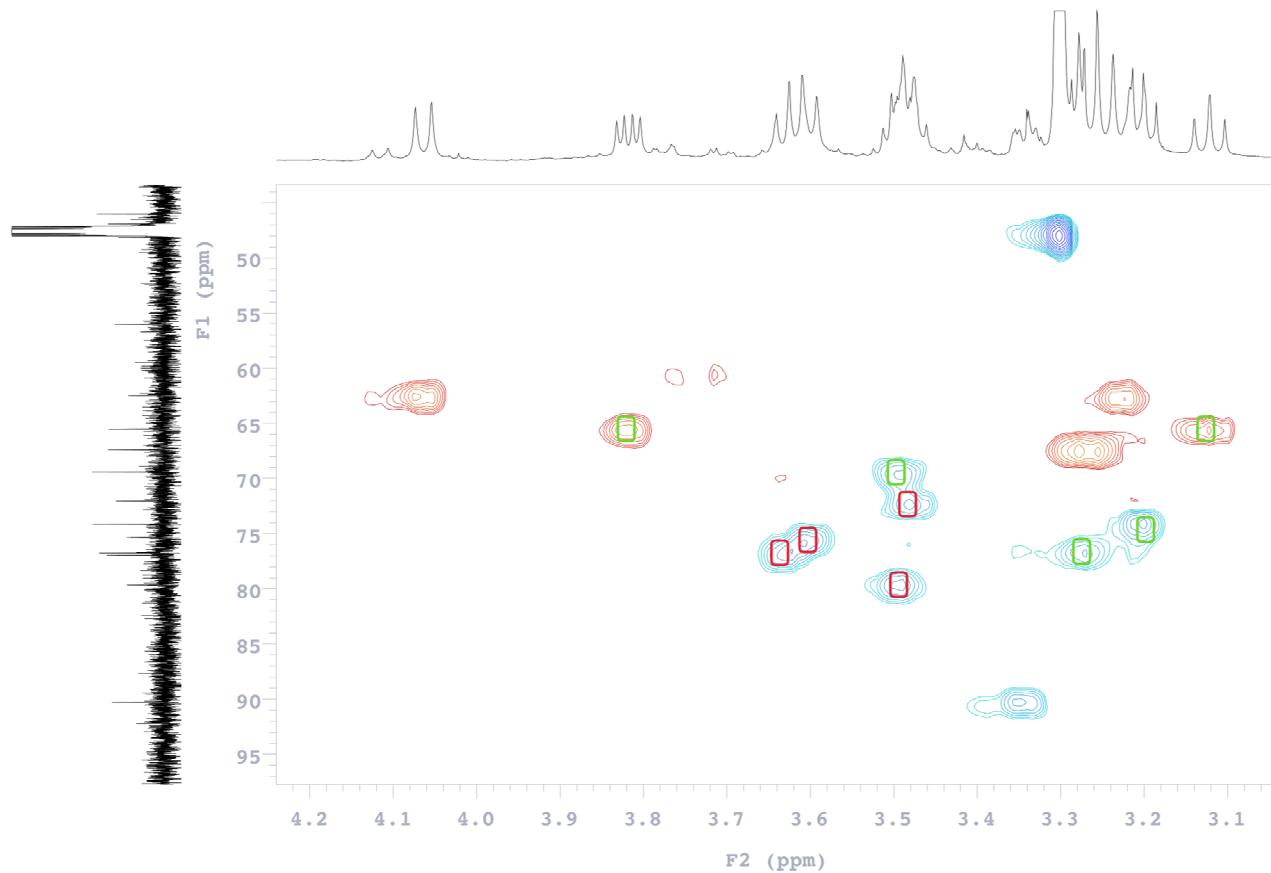
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-24**

Pulse sequence **gHSQCAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-Inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-25

Figure S29- HSQC spectrum of compound 2 zoomed-in (b)



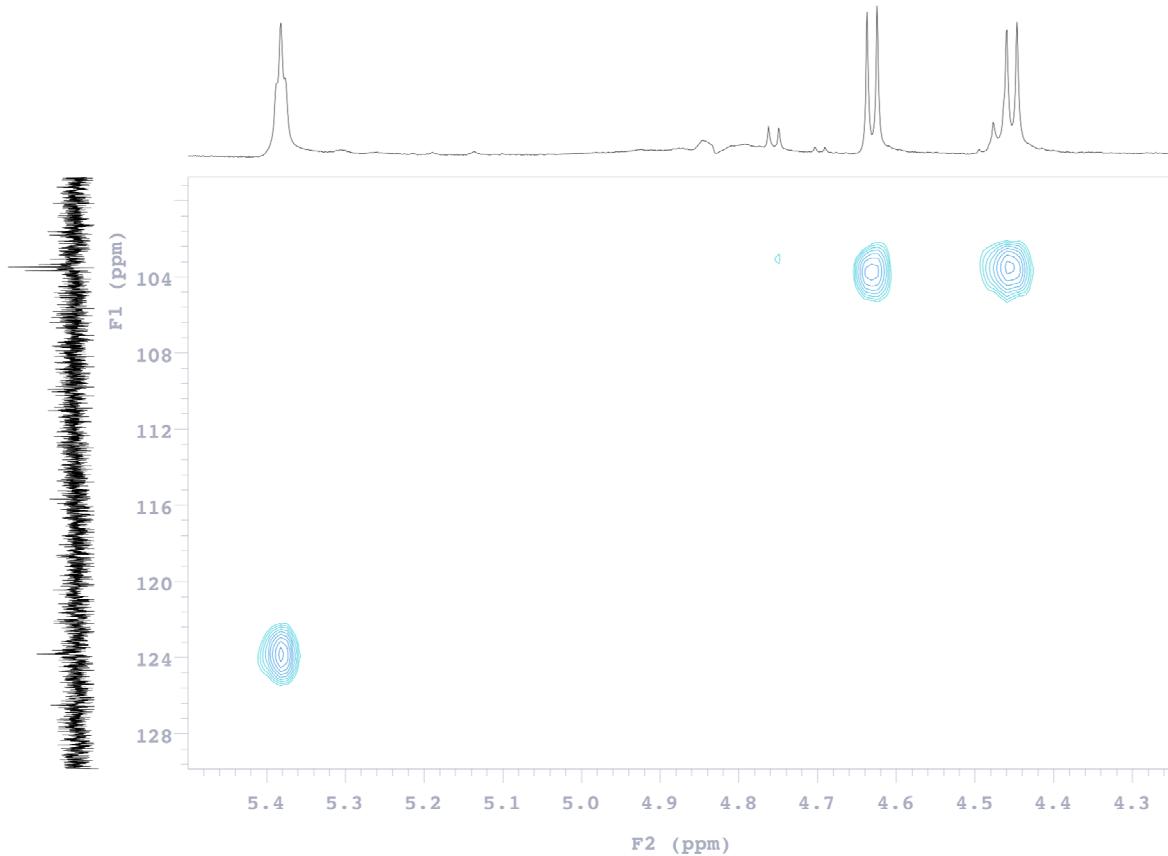
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-24**

Pulse sequence **gHSQCAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-25

Figure S30 - HSQC spectrum of compound 2 zoomed-in (c)



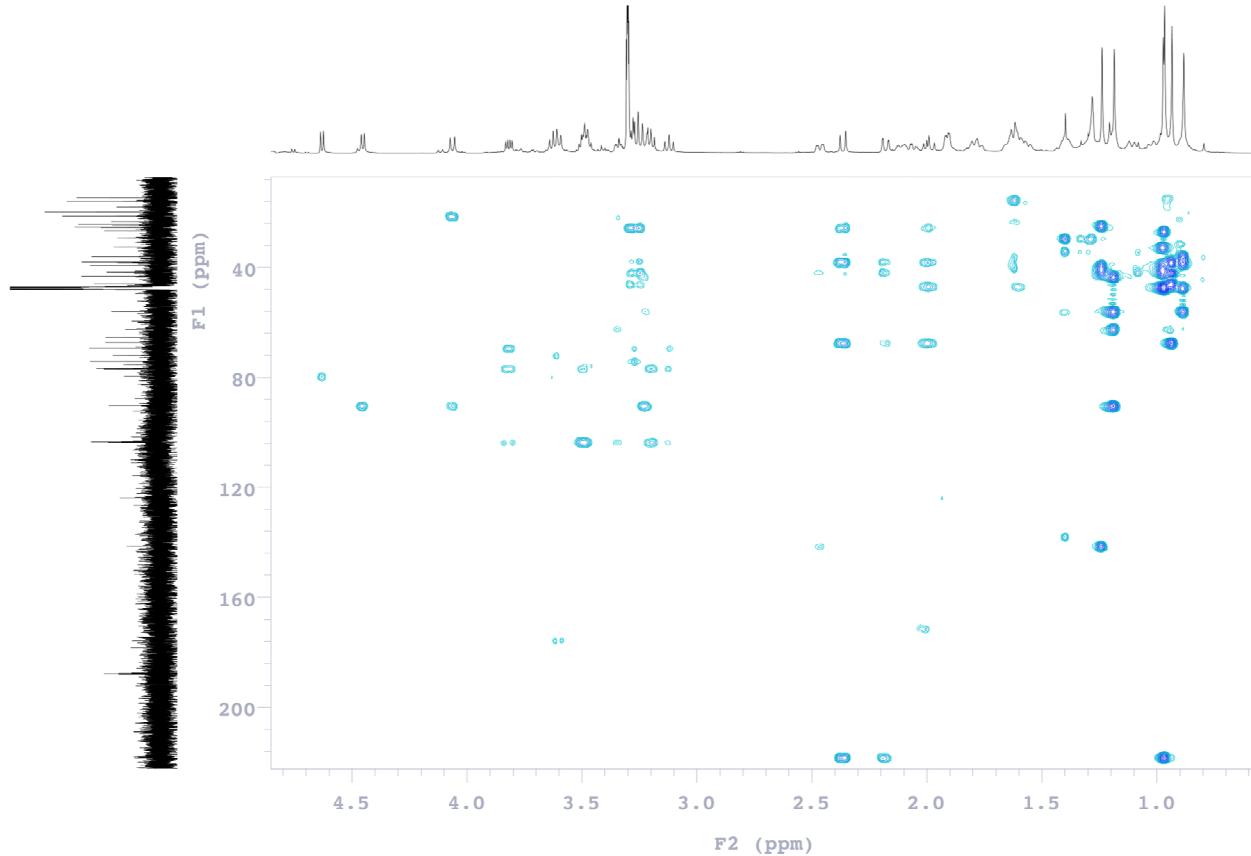
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-24**

Pulse sequence **gHMBCAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-25

Figure S31 - HMBC spectrum of compound 2



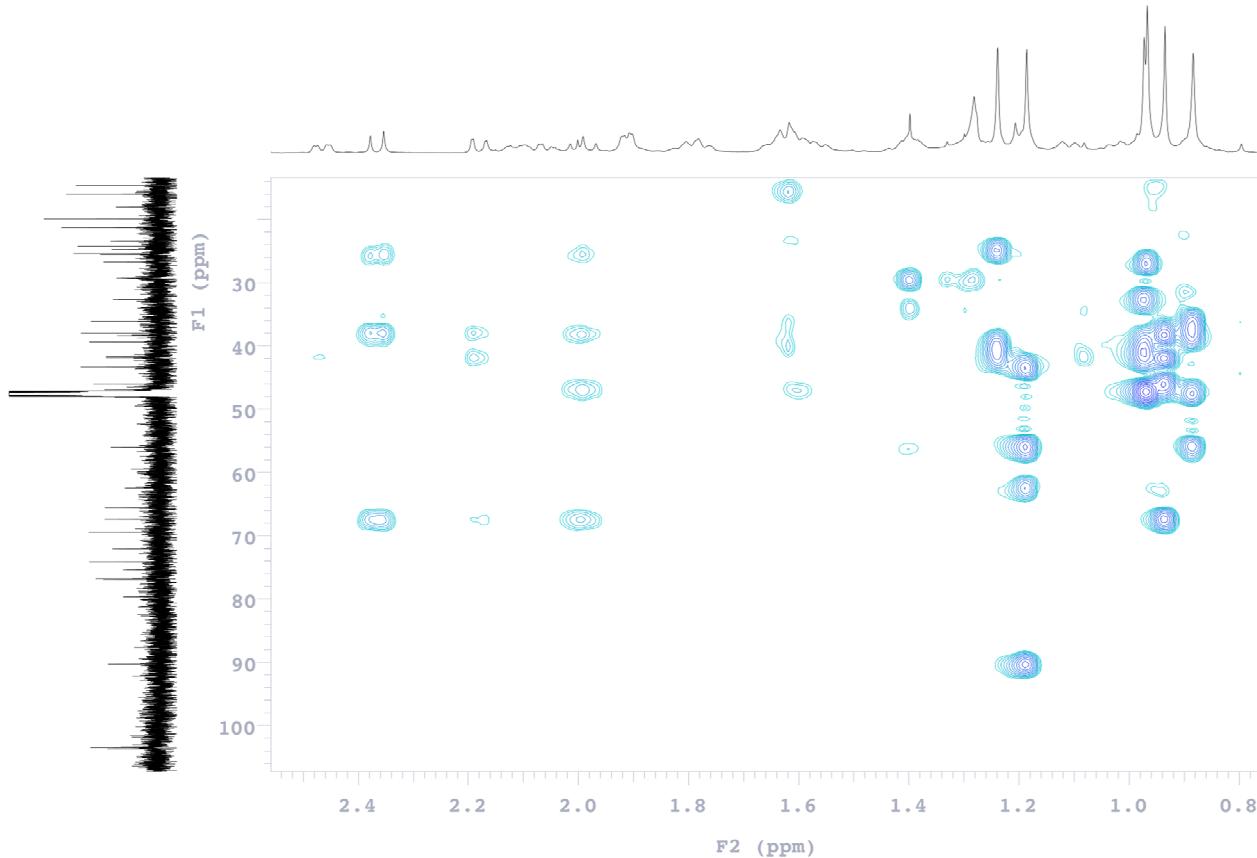
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-24**

Pulse sequence **gHMBCAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



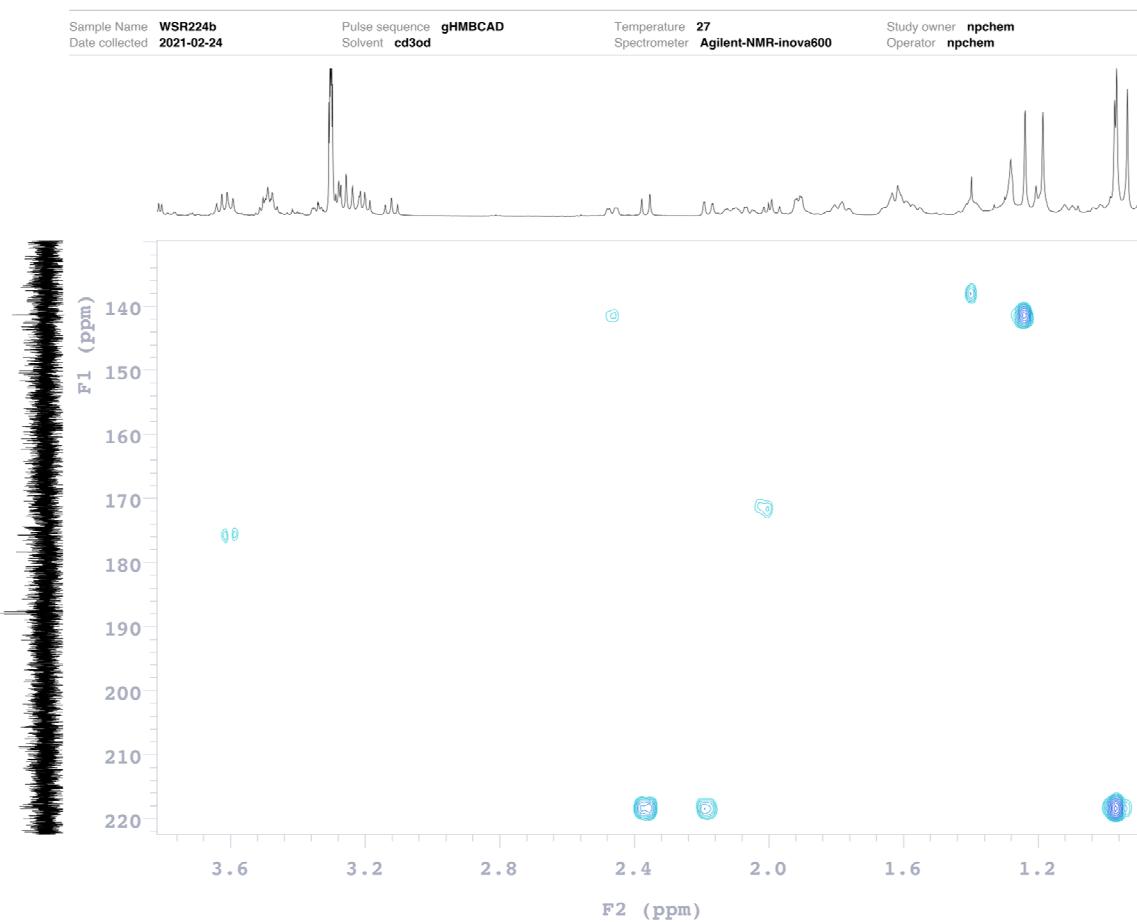
Data file exp

Plot date 2021-02-25

Figure S32 - HMBC spectrum of compound 2 zoomed-in (a)



Compound 2



Data file exp

Plot date 2021-02-25

Figure S33 - HMBC spectrum of compound 2 zoomed-in (b)



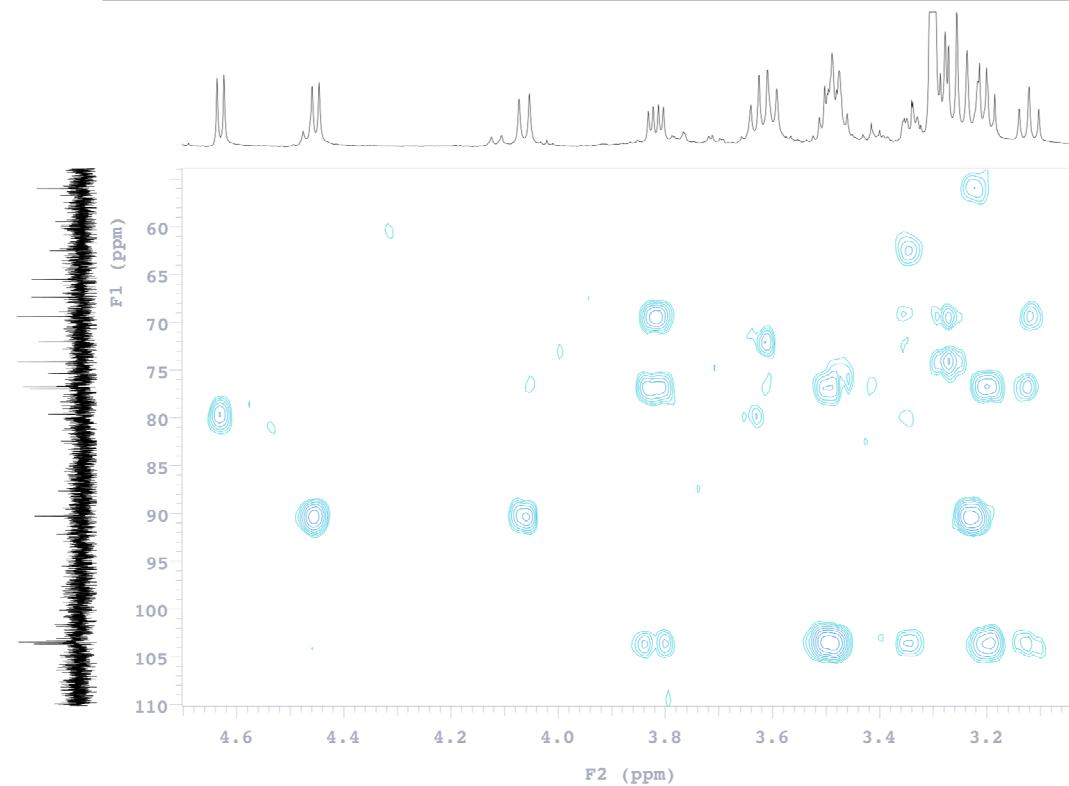
Compound 2

Sample Name **WSP224b**
Date collected **2021-02-24**

Pulse sequence **gHMBCAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-Inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-25

Figure S34 - HMBC spectrum of compound 2 zoomed-in (c)



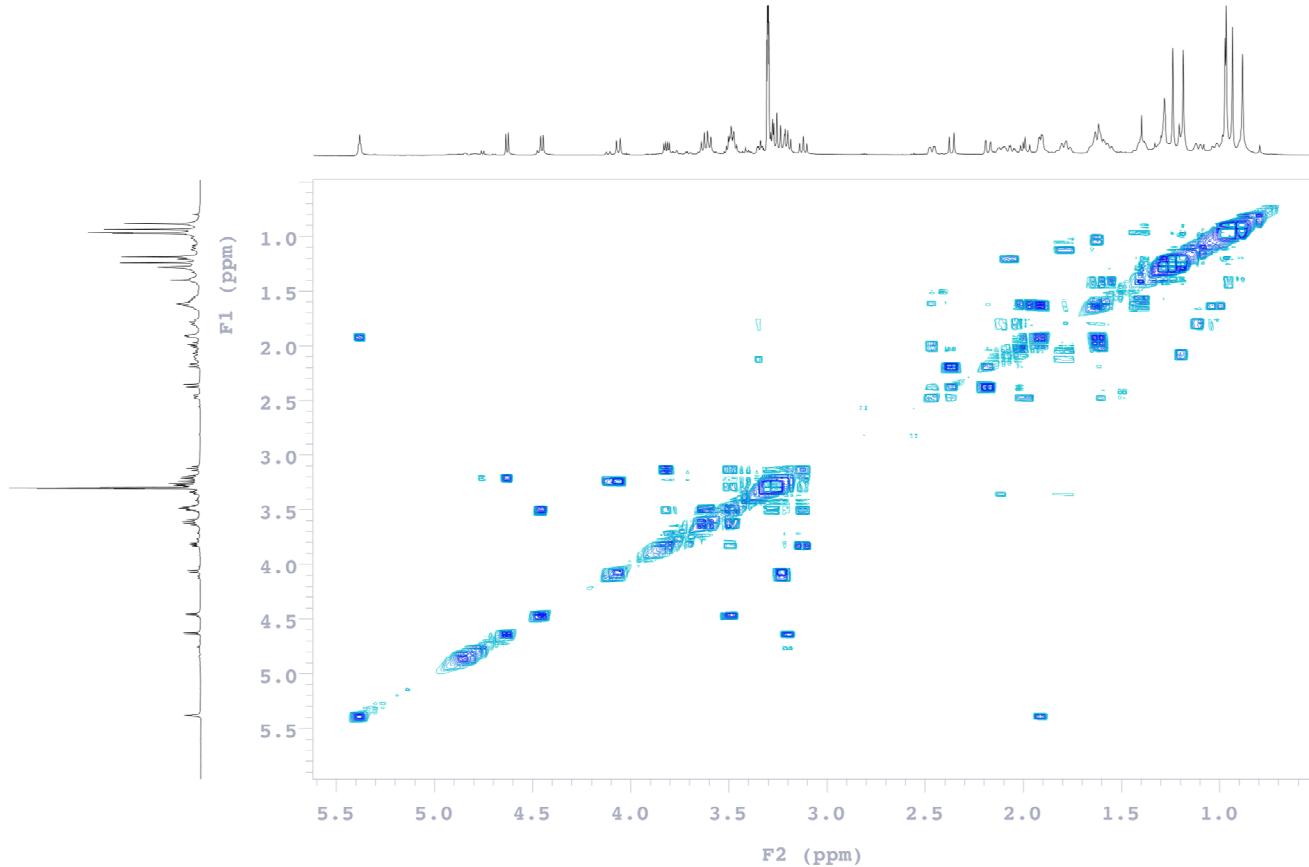
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-24**

Pulse sequence **gCOSY**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-Inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-24

Figure S35 - COSY spectrum of compound 2



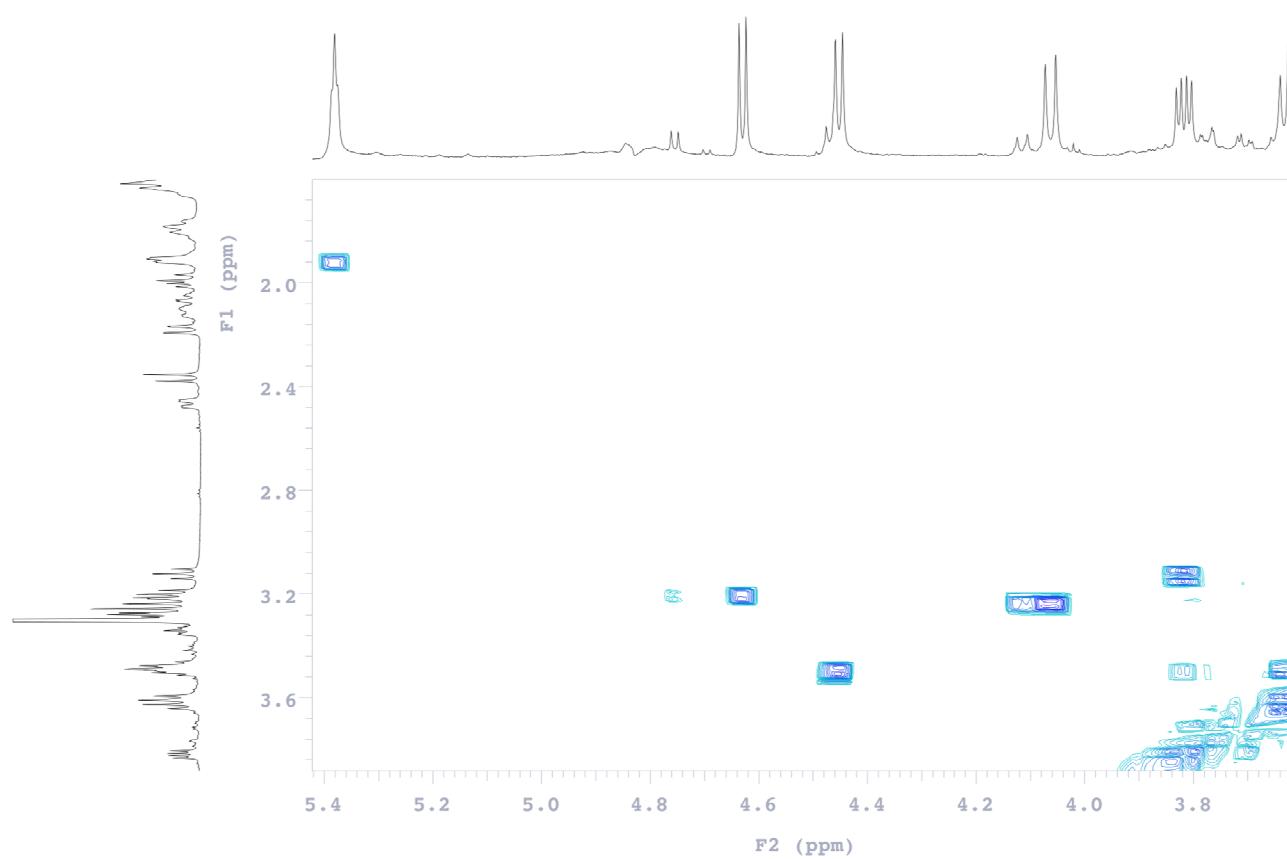
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-24**

Pulse sequence **gCOSY**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-Inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-24

Figure S36 - COSY spectrum of compound 2 zoomed-in



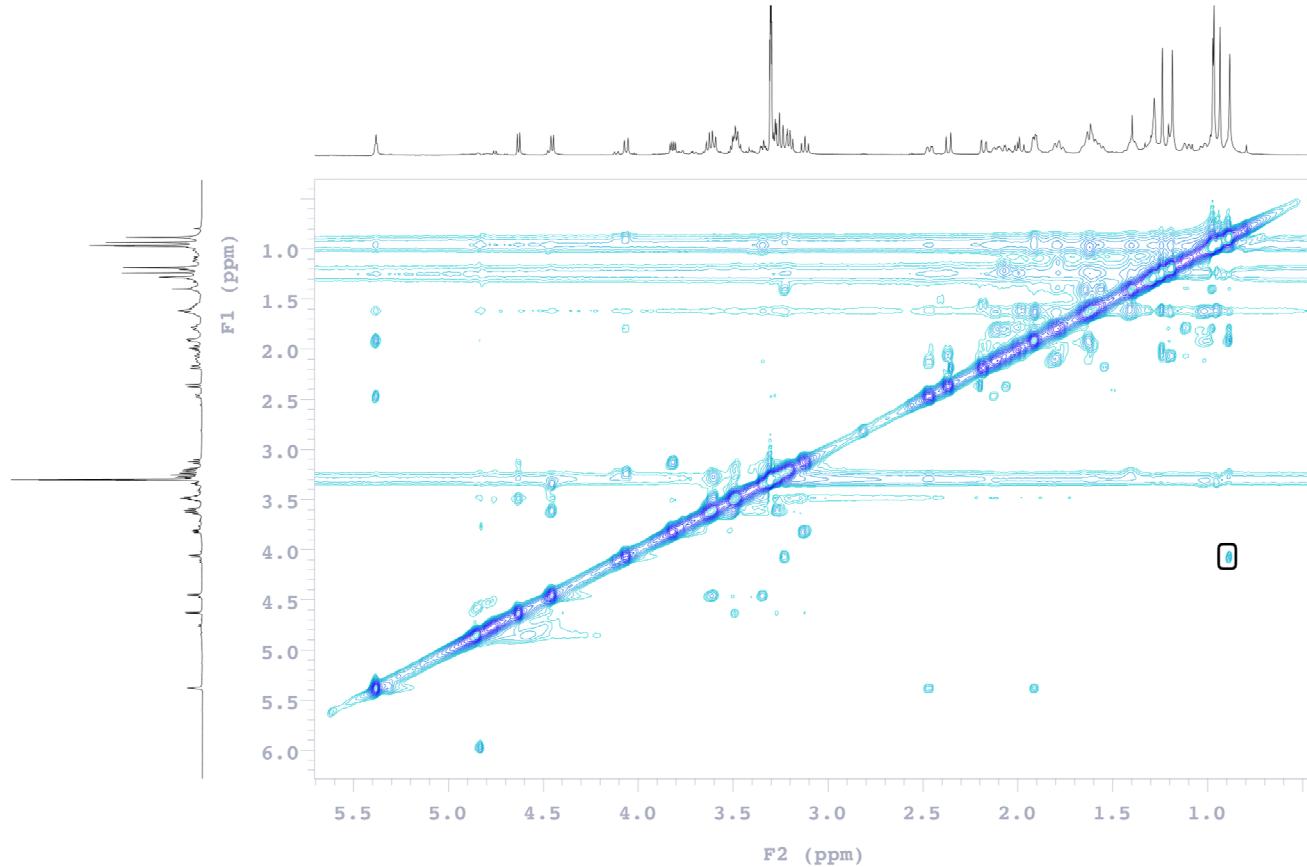
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-24**

Pulse sequence **ROESYAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-Inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-24

Figure S37 - ROESY spectrum of compound 2



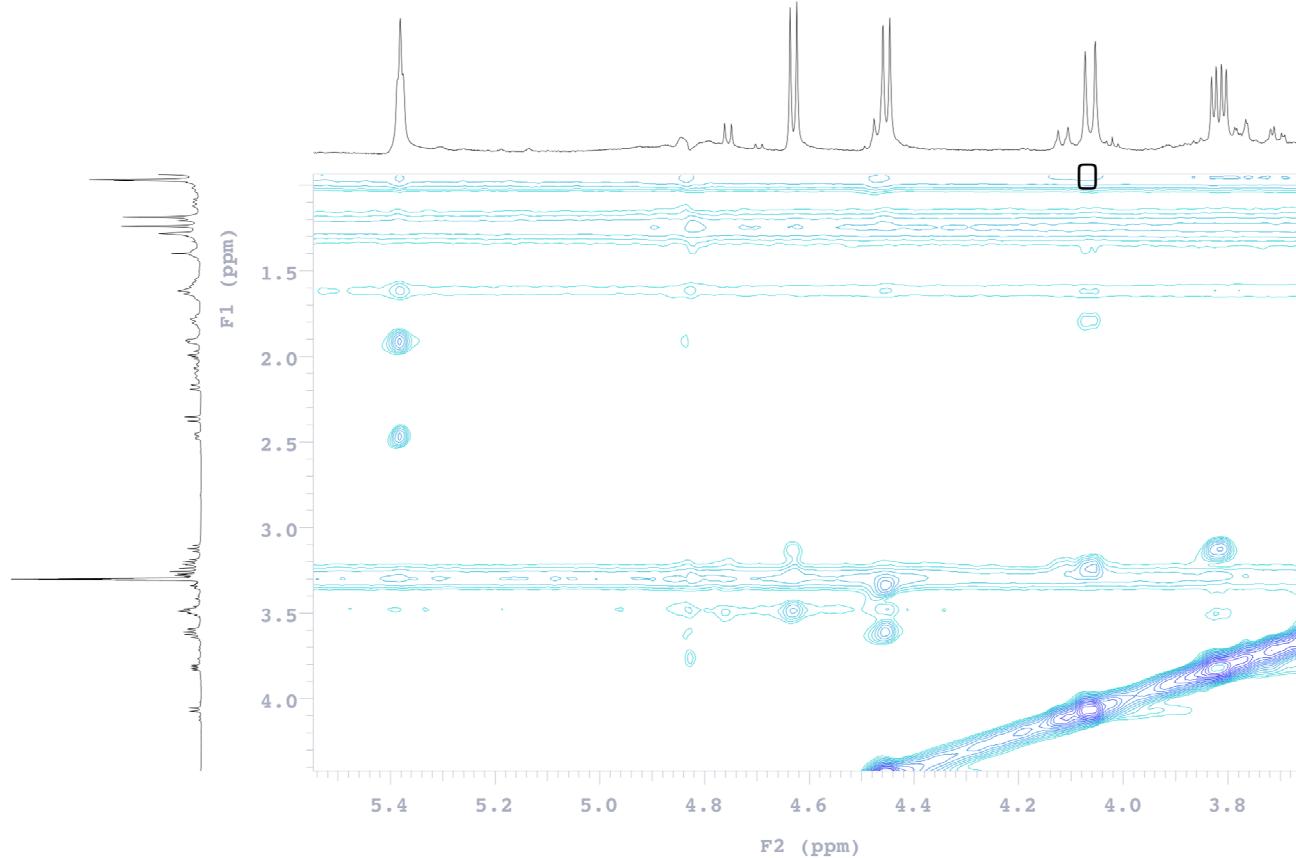
Compound 2

Sample Name **WSR224b**
Date collected **2021-02-24**

Pulse sequence **ROESYAD**
Solvent **cd3od**

Temperature **27**
Spectrometer **Agilent-NMR-inova600**

Study owner **npchem**
Operator **npchem**



Data file exp

Plot date 2021-02-24

Figure S38 - ROESY spectrum of compound 2 zoomed-in