

## Supporting Information

### **Triterpenoid saponins from the cultivar “Green Elf” of *Pittosporum tenuifolium***

**David Pertuit <sup>1</sup>, Anne-Claire Mitaine-Offer <sup>1,\*</sup>, Tomofumi Miyamoto <sup>2</sup>, Chiaki Tanaka <sup>2</sup>,  
Christine Belloir <sup>3</sup>, Loïc Briand <sup>3</sup>, Marie-Aleth Lacaille-Dubois <sup>1</sup>**

<sup>1</sup> PEPITE EA 4267, Laboratoire de Pharmacognosie, UFR des Sciences de Santé, Université de Bourgogne Franche-Comté, BP 87900, 21079 Dijon cedex, France

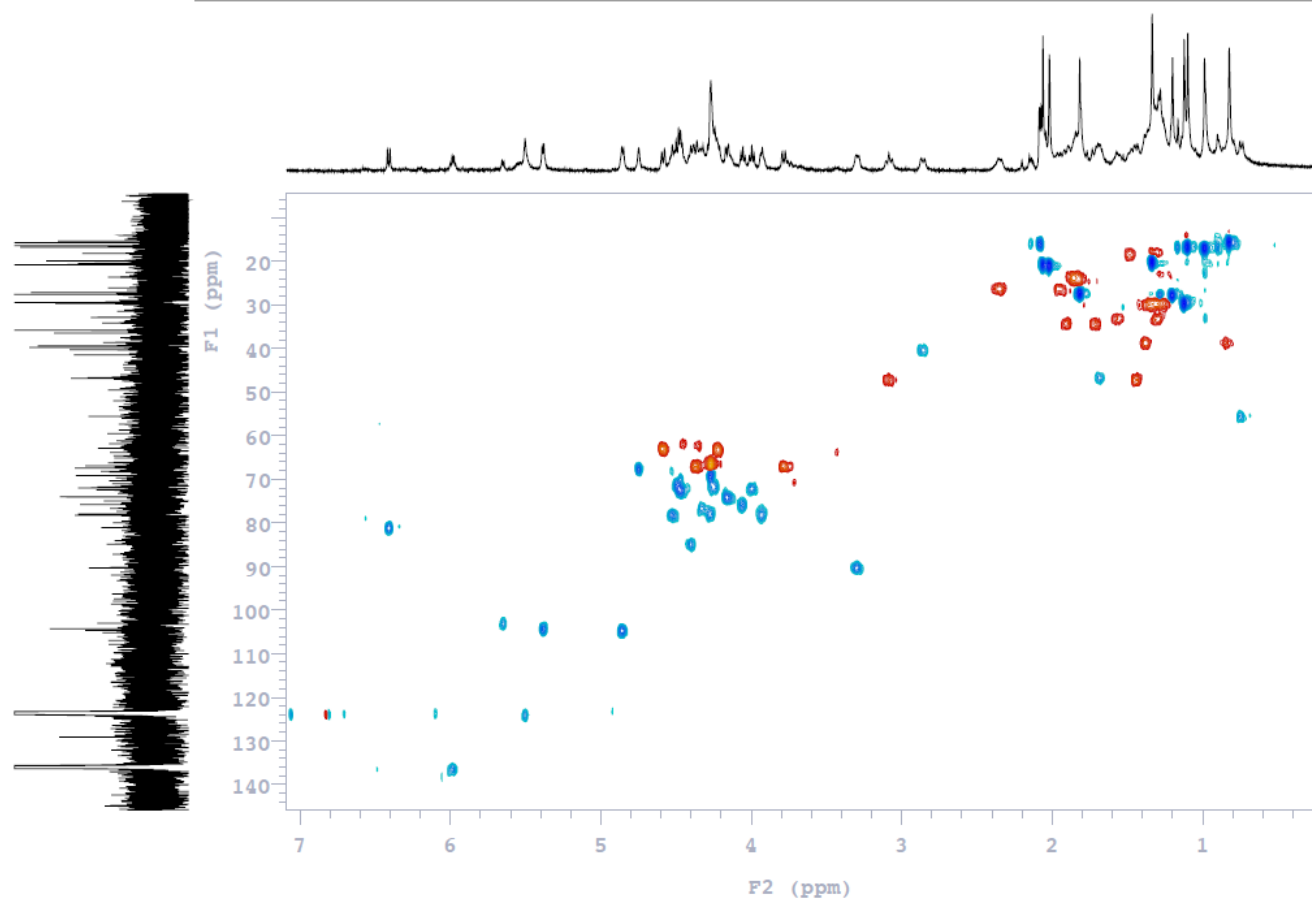
<sup>2</sup> Graduate school of pharmaceutical Sciences, Kyushu University, Fukuoka, Japan

<sup>3</sup> Centre des Sciences du Goût et de l'Alimentation, AgroSup Dijon, CNRS, INRAE, Université Bourgogne Franche-Comté, 21065 Dijon cedex, France

\* Correspondence: [anne-claire.offer@u-bourgogne.fr](mailto:anne-claire.offer@u-bourgogne.fr); Tel. : +33-3-80-39-34-74

## CONTENTS

<b>Figure S1.</b> HSQC spectrum of compound 1.....	3
<b>Figure S2.</b> HMBC spectra of compound 1.....	5
<b>Figure S3.</b> COSY spectrum of compound 1.....	6
<b>Figure S4.</b> TOCSY spectrum of compound 1 .....	7
<b>Figure S5.</b> ROESY spectrum of compound 1 .....	8
<b>Figure S6.</b> HSQC spectrum of compound 2.....	9
<b>Figure S7.</b> HMBC spectra of compound 2.....	11
<b>Figure S8.</b> COSY spectrum of compound 2.....	12
<b>Figure S9.</b> TOCSY spectrum of compound 2 .....	13
<b>Figure S10.</b> ROESY spectrum of compound 2 .....	14
<b>Figure S11.</b> Activation of hTAS1R2-hTAS1R3 by sucralose.....	15
<b>Figure S12.</b> Inhibitory effect of GS on the response of sucralose by hTAS1R2-hTAS1R3 .....	16



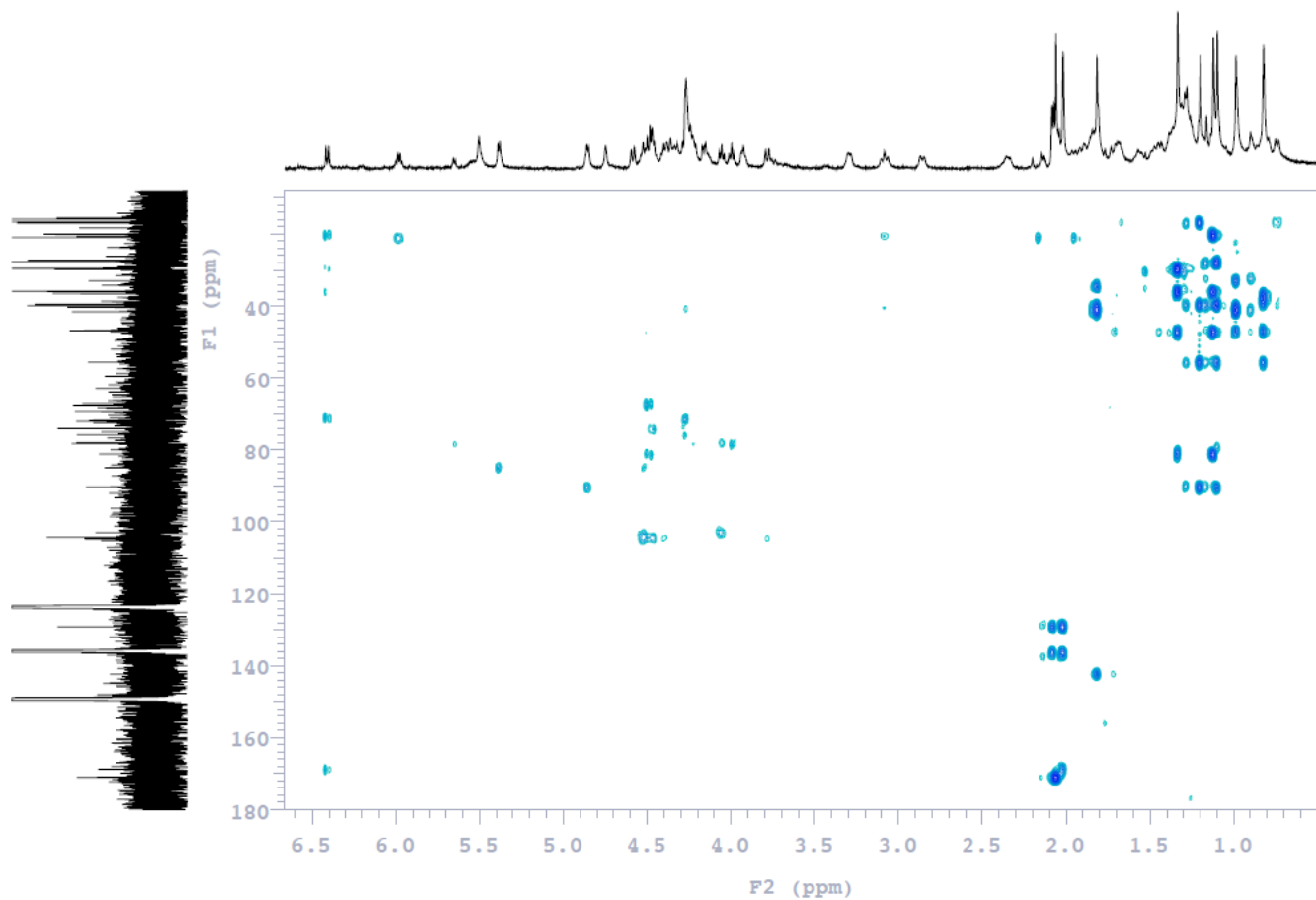
**Figure S1.** HSQC spectrum of compound **1**

Sample Name **PTFX1**  
Date collected **2020-02-06**

Pulse sequence **gHMBCAD**  
Solvent **pyridine**

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

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

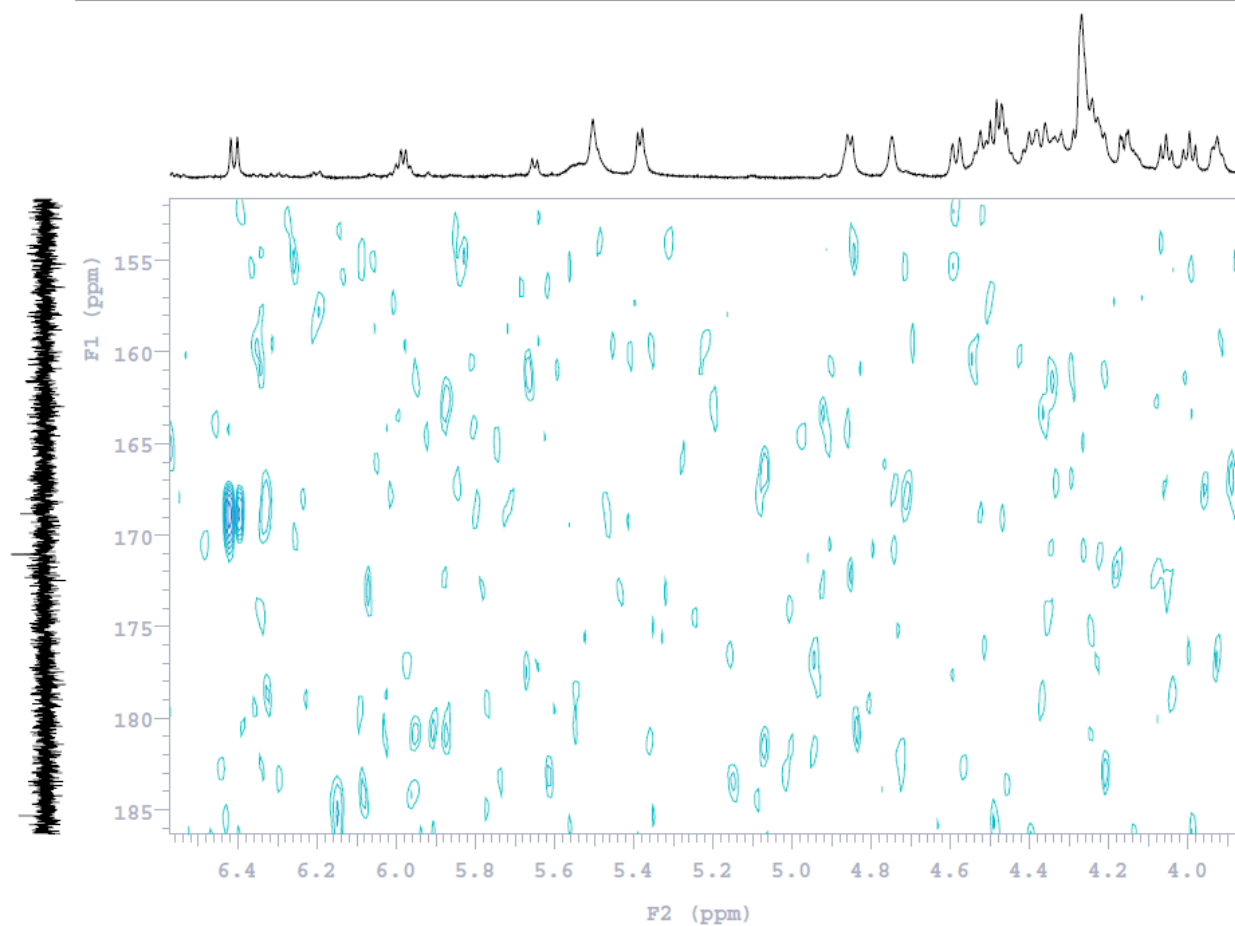


Sample Name **PTFX1**  
Date collected **2020-02-06**

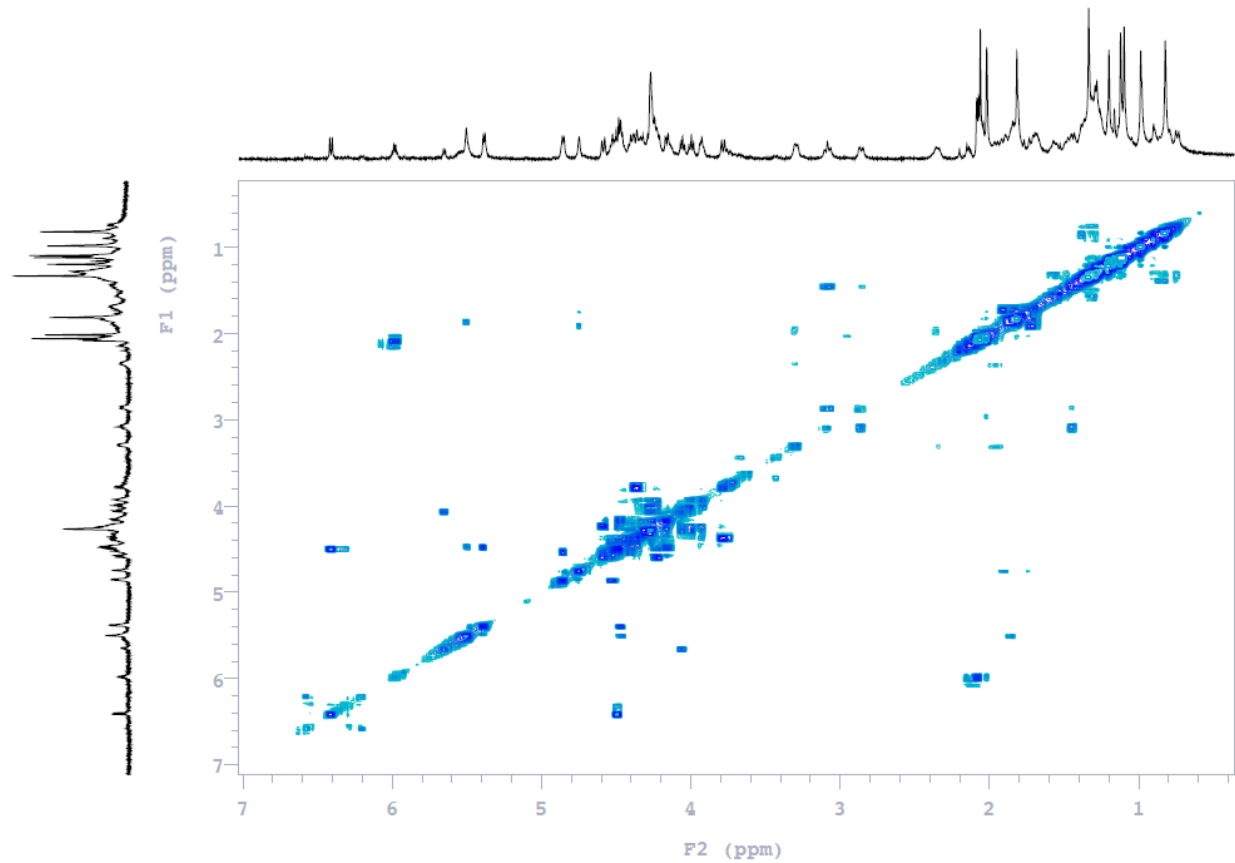
Pulse sequence **gHMBCAD**  
Solvent **pyridine**

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

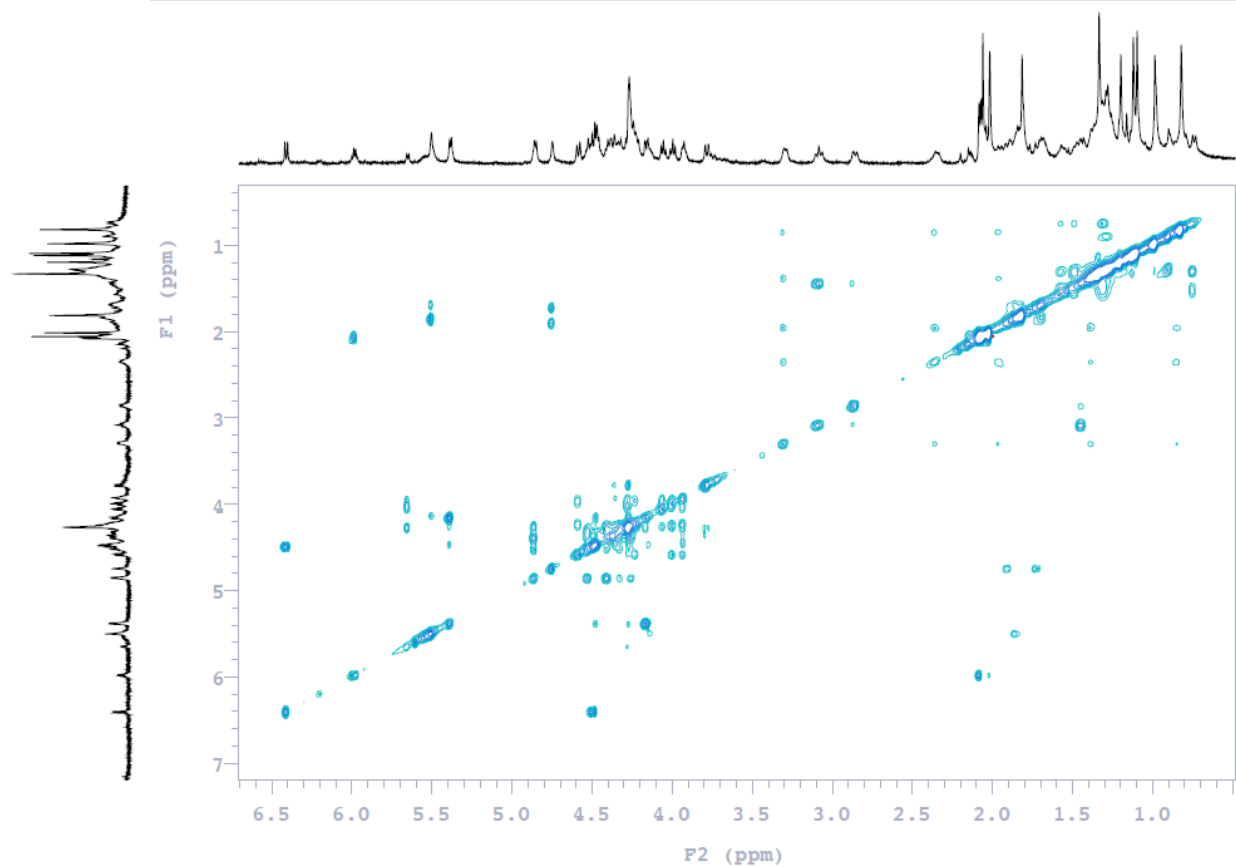
Study owner **npchem**  
Operator **npchem**



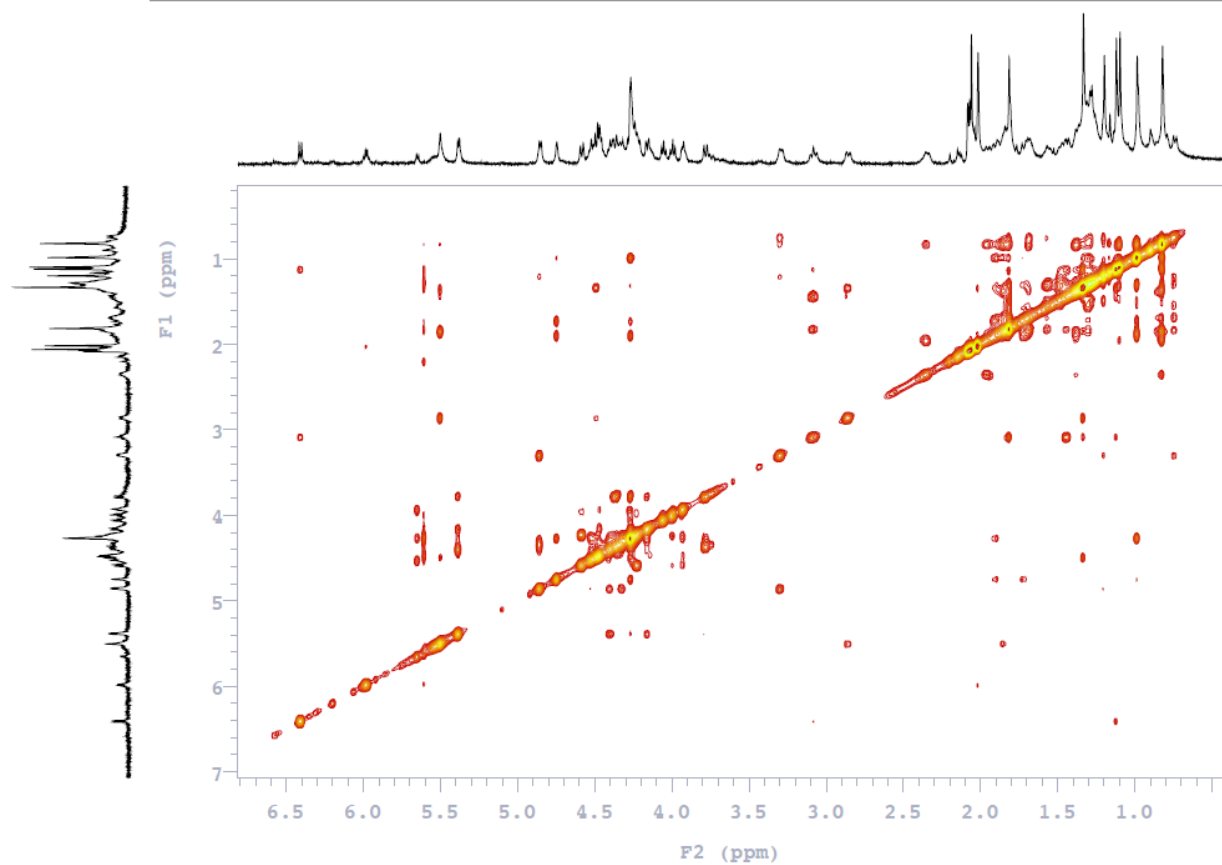
**Figure S2.** HMBC spectra of compound **1**



**Figure S3.** COSY spectrum of compound **1**



**Figure S4.** TOCSY spectrum of compound **1**



**Figure S5.** ROESY spectrum of compound **1**

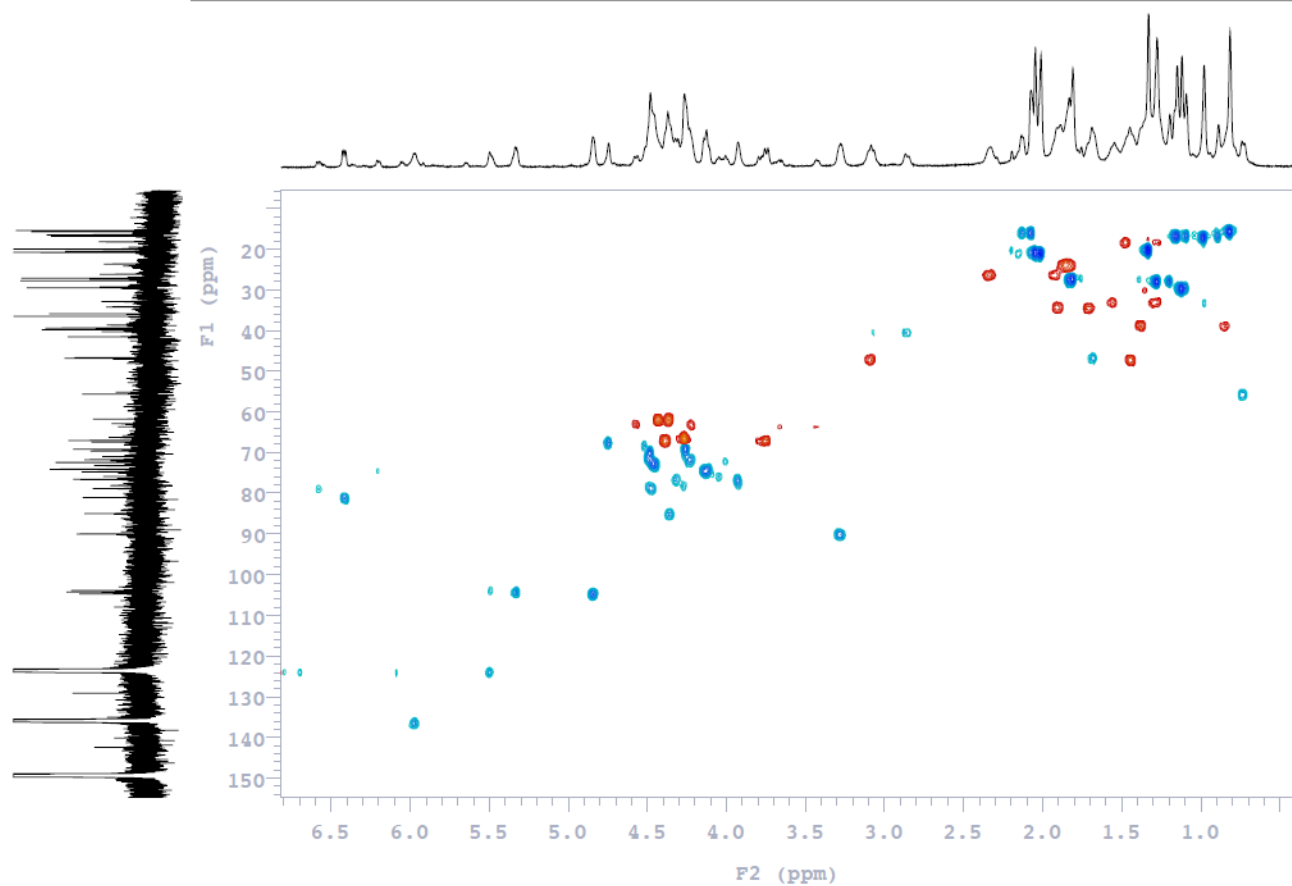


Sample Name **PTFW2**  
Date collected **2020-02-07**

Pulse sequence **gHSQCAD**  
Solvent **pyridine**

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

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



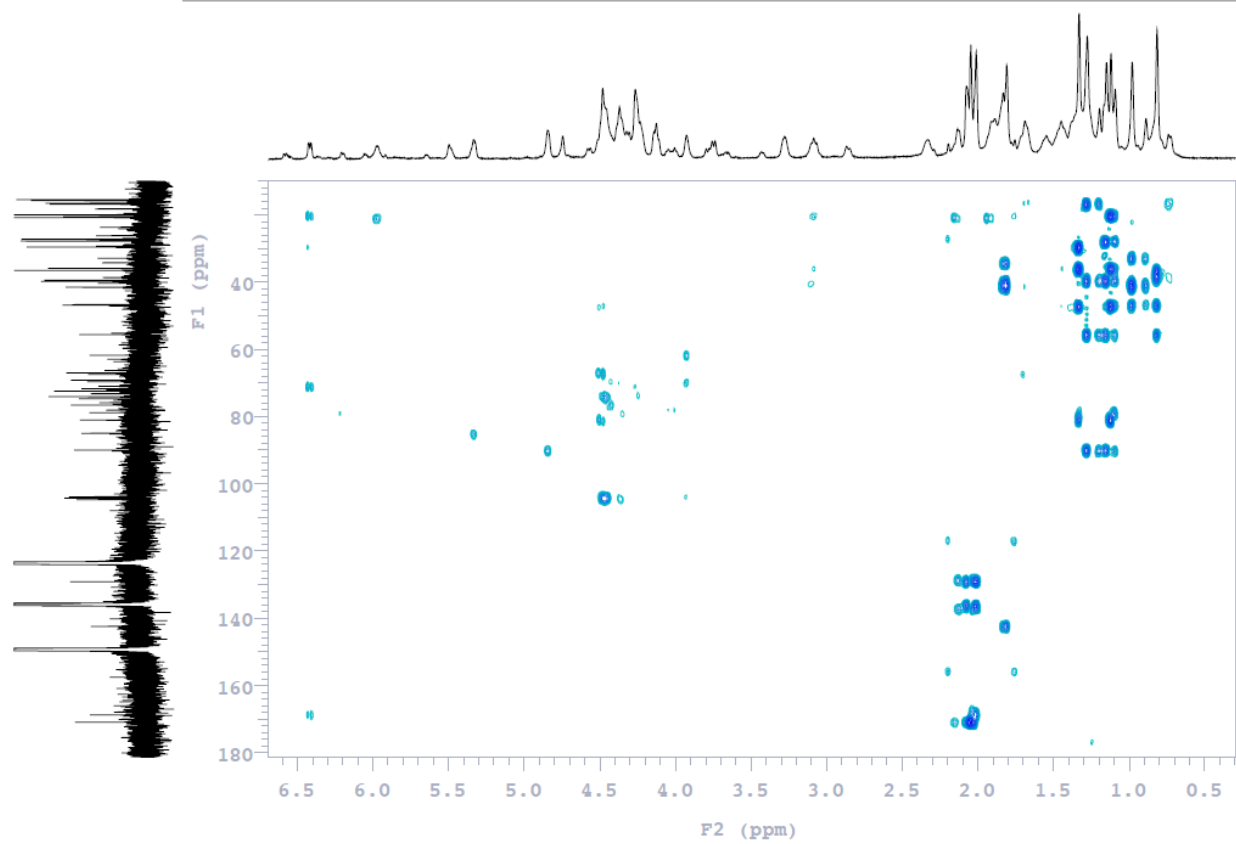
**Figure S6.** HSQC spectrum of compound 2

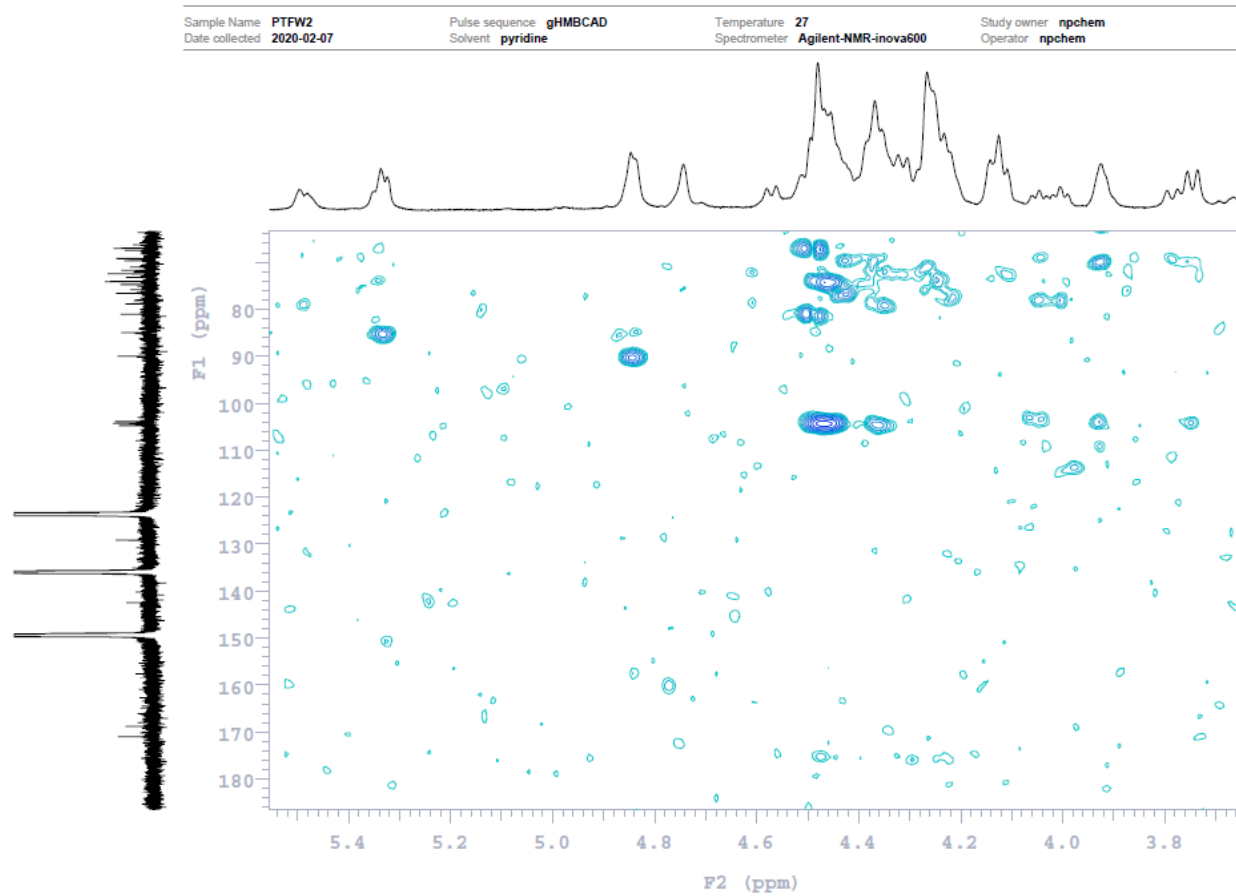
Sample Name **PTFW2**  
Date collected **2020-02-07**

Pulse sequence **gHMBCAD**  
Solvent **pyridine**

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

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





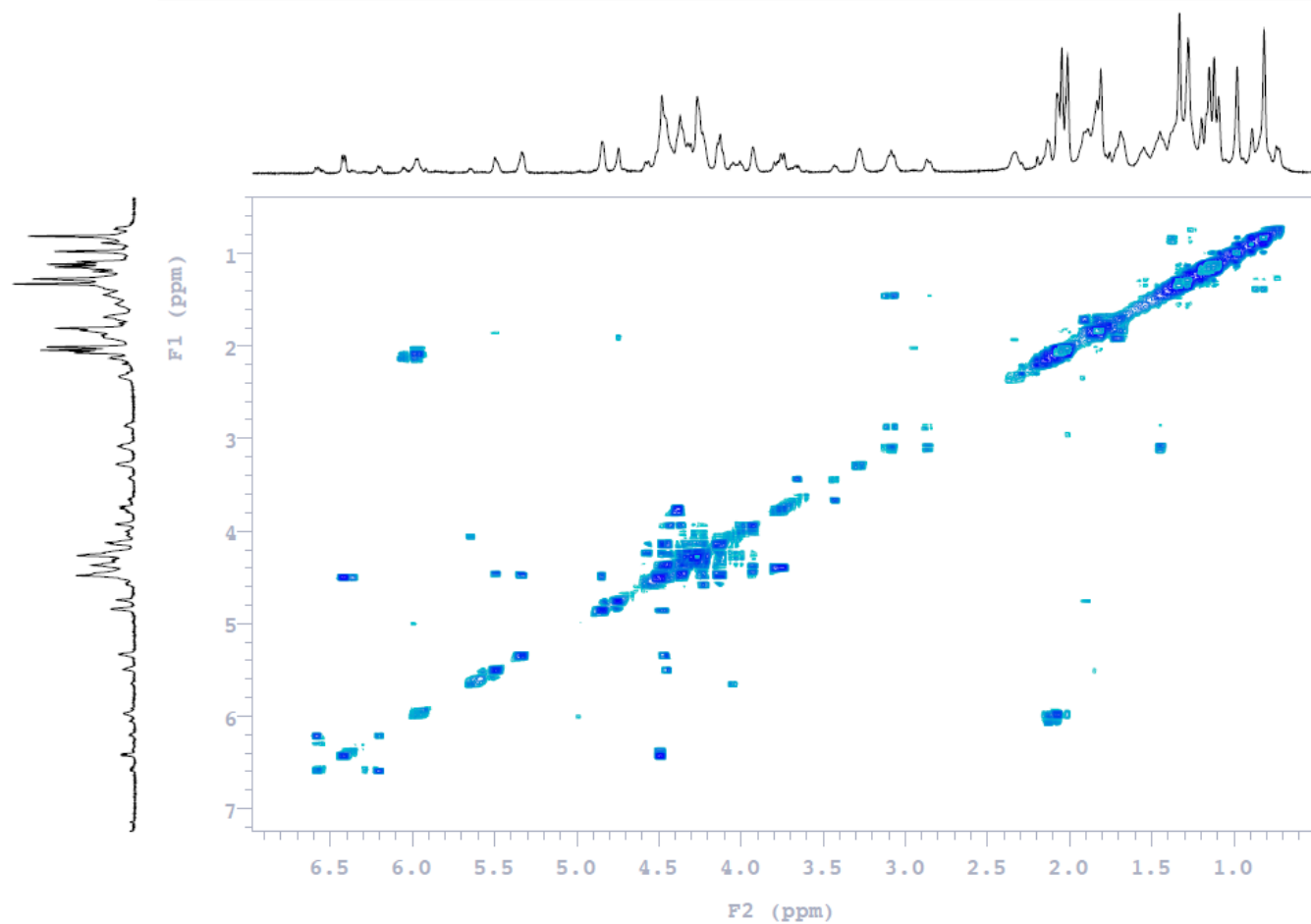
**Figure S7.** HMBC spectra of compound **2**

Sample Name **PTFW2**  
Date collected **2020-02-07**

Pulse sequence **gCOSY**  
Solvent **pyridine**

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

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



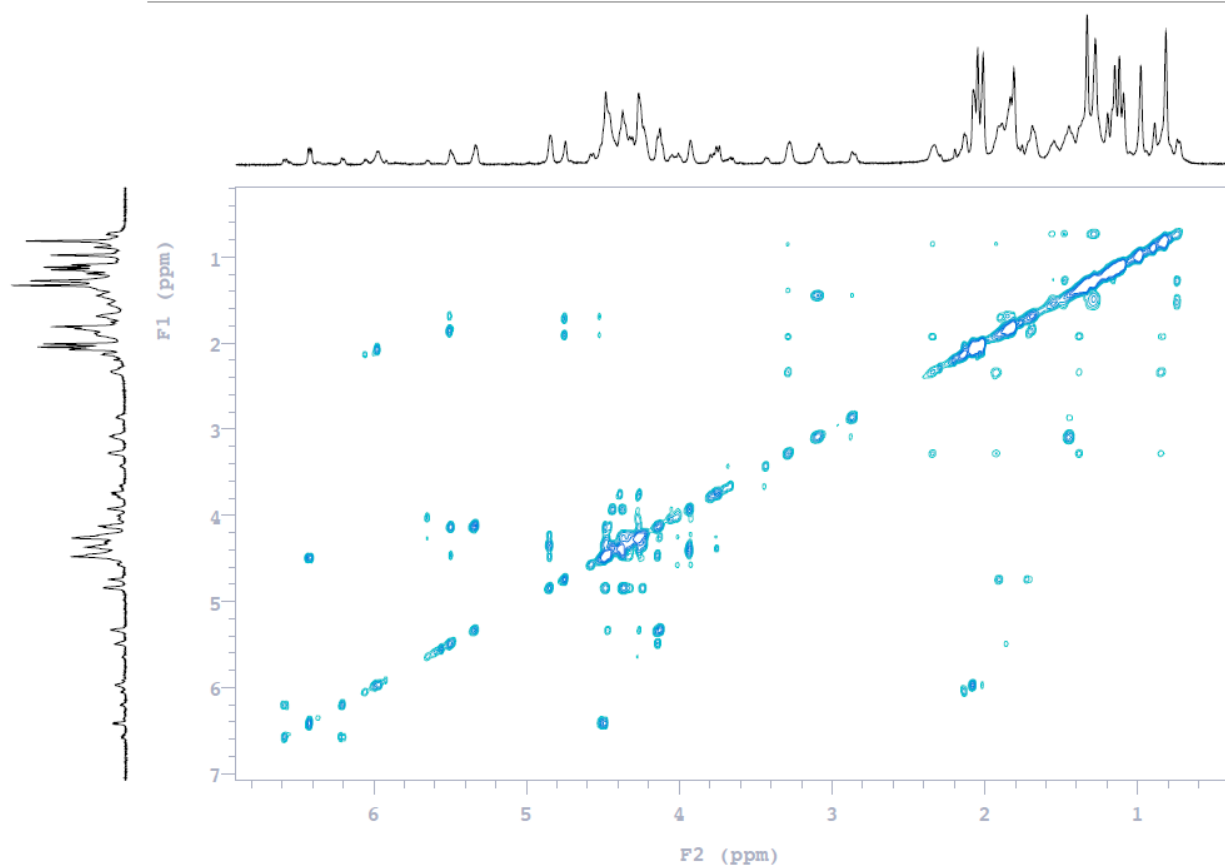
**Figure S8.** COSY spectrum of compound **2**

Sample Name **PTFW2**  
Date collected **2020-02-07**

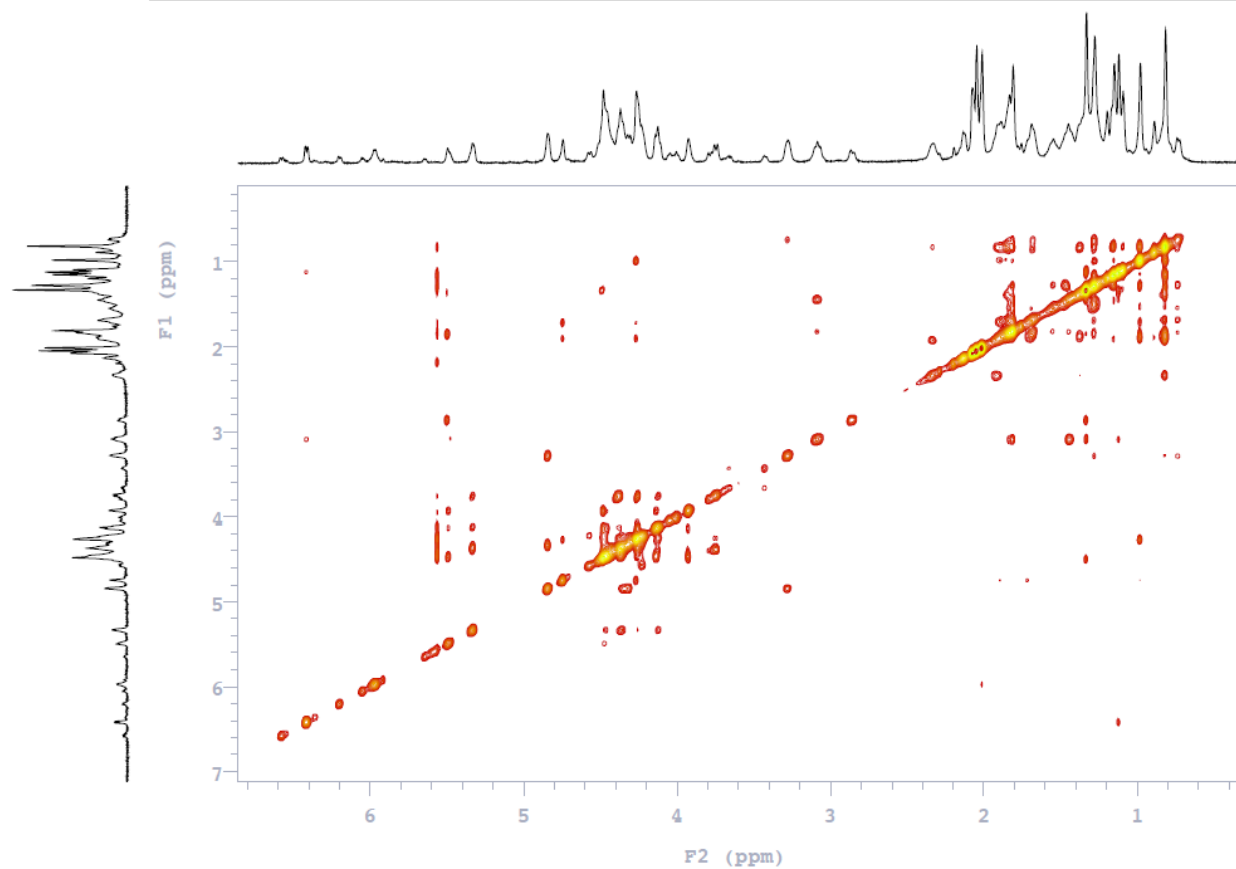
Pulse sequence **zTOCSY**  
Solvent **pyridine**

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

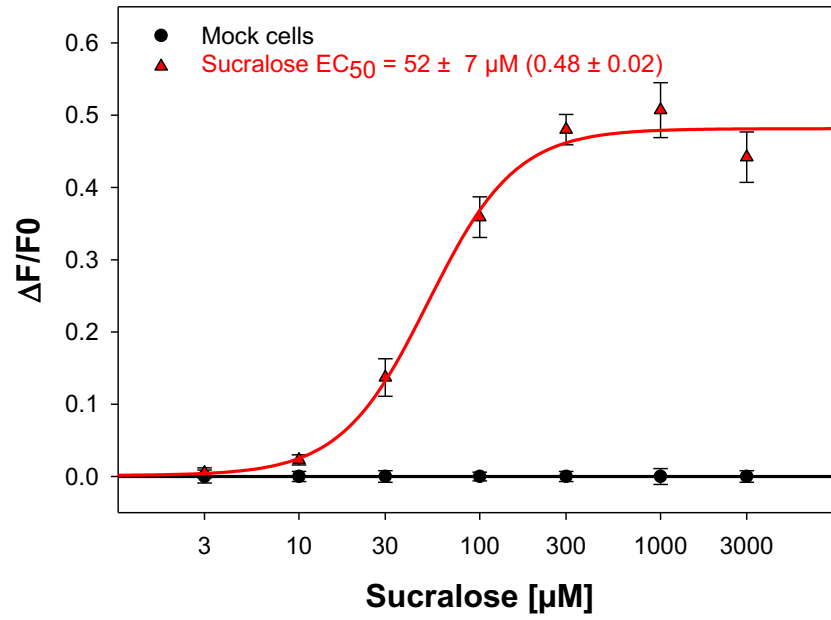
Study owner **npchem**  
Operator **npchem**



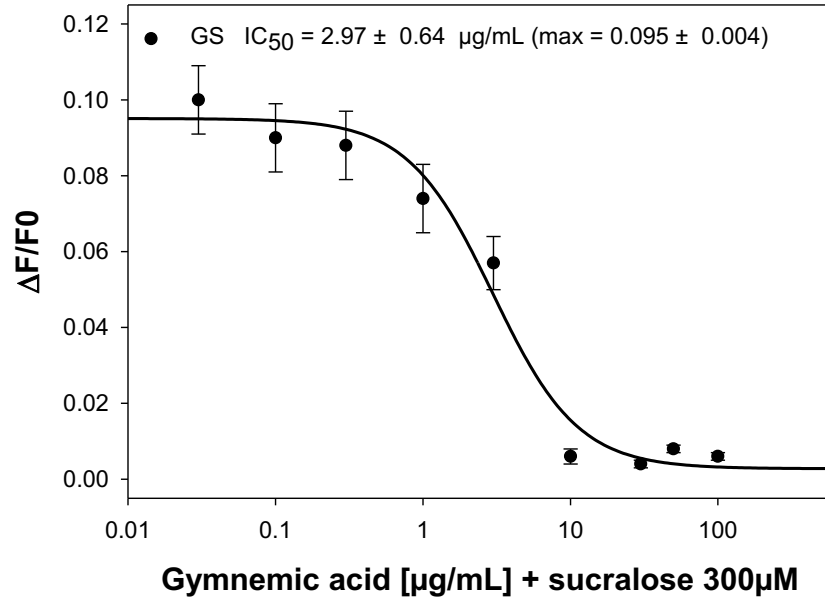
**Figure S9.** TOCSY spectrum of compound **2**



**Figure S10.** ROESY spectrum of compound 2



**Figure S11.** Activation of hTAS1R2-hTAS1R3 by sucralose



**Figure S12.** Inhibitory effect of GS on the response of sucralose by hTAS1R2-hTAS1R3