

# Alpha-mangostin improves insulin secretion and protects INS-1 cells from streptozotocin-induced damage

Dahae Lee<sup>1,2,†</sup>, Young-Mi Kim<sup>3,†</sup>, Kiwon Jung<sup>4,†</sup>, Young-Won Chin<sup>3,\*</sup>, Ki Sung Kang<sup>2,\*</sup>

<sup>1</sup> School of Pharmacy, Sungkyunkwan University, Suwon 16419, Republic of Korea; pjsldh@naver.com

<sup>2</sup> College of Korean Medicine, Gachon University, Seongnam 13120, Republic of Korea; kkang@gachon.ac.kr

<sup>3</sup> College of Pharmacy and Integrated Research Institute for Drug Development, Dongguk University-Seoul, Gyeonggi 10326, Korea; 0210121@hanmail.net; f2744@dongguk.edu

<sup>4</sup> Institute of Pharmaceutical Sciences, College of Pharmacy, CHA University, Sungnam 13844, Korea; pharmj@cha.ac.kr

<sup>†</sup> These authors contributed equally to this work

\*Correspondence: f2744@dongguk.edu; Tel.: + 82-31-961-5218 (Y.W.C.) and kkang@gachon.ac.kr; Tel.: + 82-31-750-5402 (K.S.K.)

## Contents

Figure S1. The <sup>1</sup> H NMR spectrum of α-mangostin (CD <sub>3</sub> OD, 400 MHz)	2
Figure S2. The <sup>13</sup> C NMR spectrum of α-mangostin (CD <sub>3</sub> OD, 100 MHz)	3
Figure S3. The UPLC UV chromatogram of α-mangostin (detected at 320 nm)	4
Figure S4. The MASS spectra of α-mangostin	5

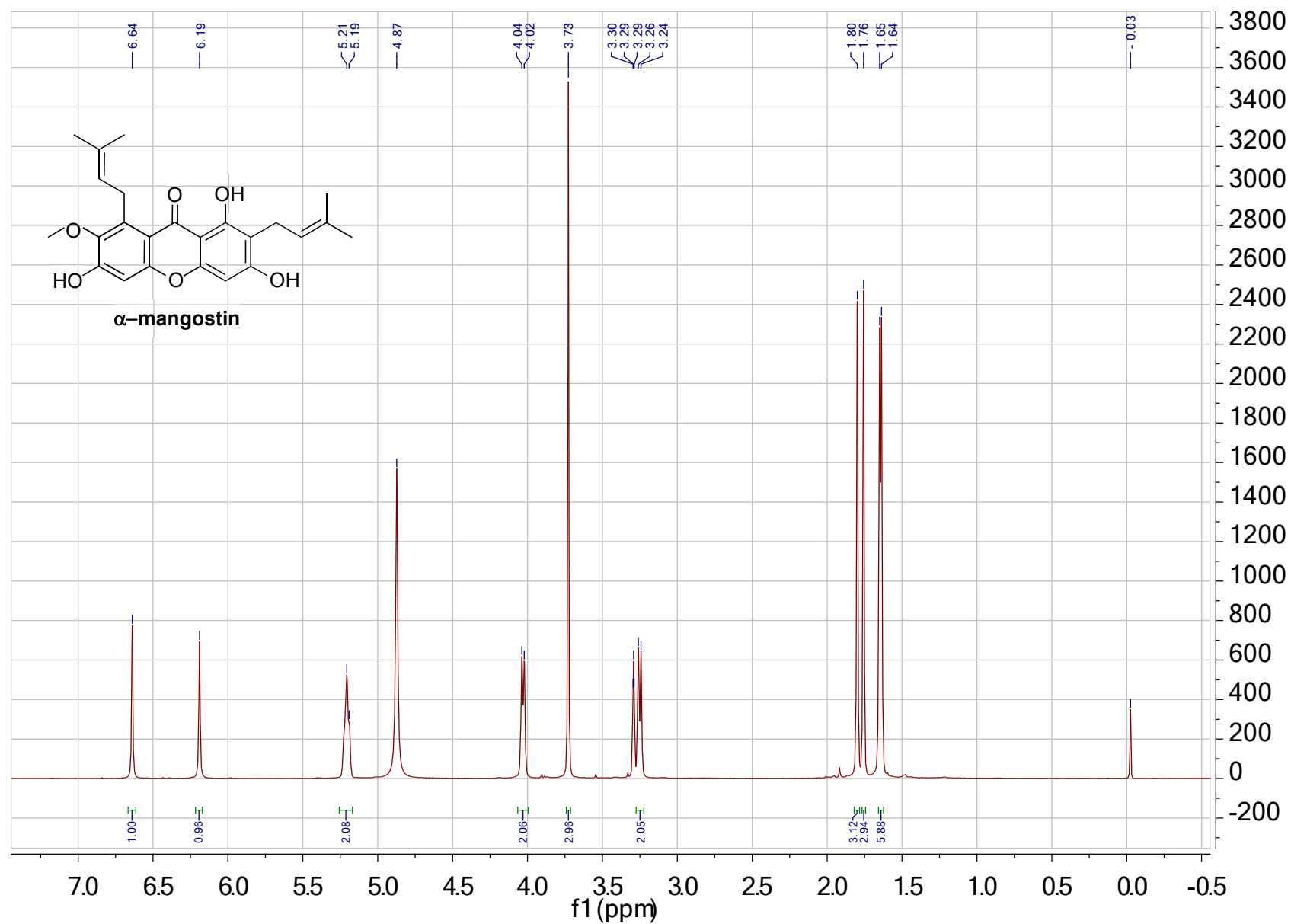


Figure S1. The  $^1\text{H}$  NMR spectrum of  $\alpha$ -mangostin in ( $\text{CD}_3\text{OD}$ , 400 MHz)

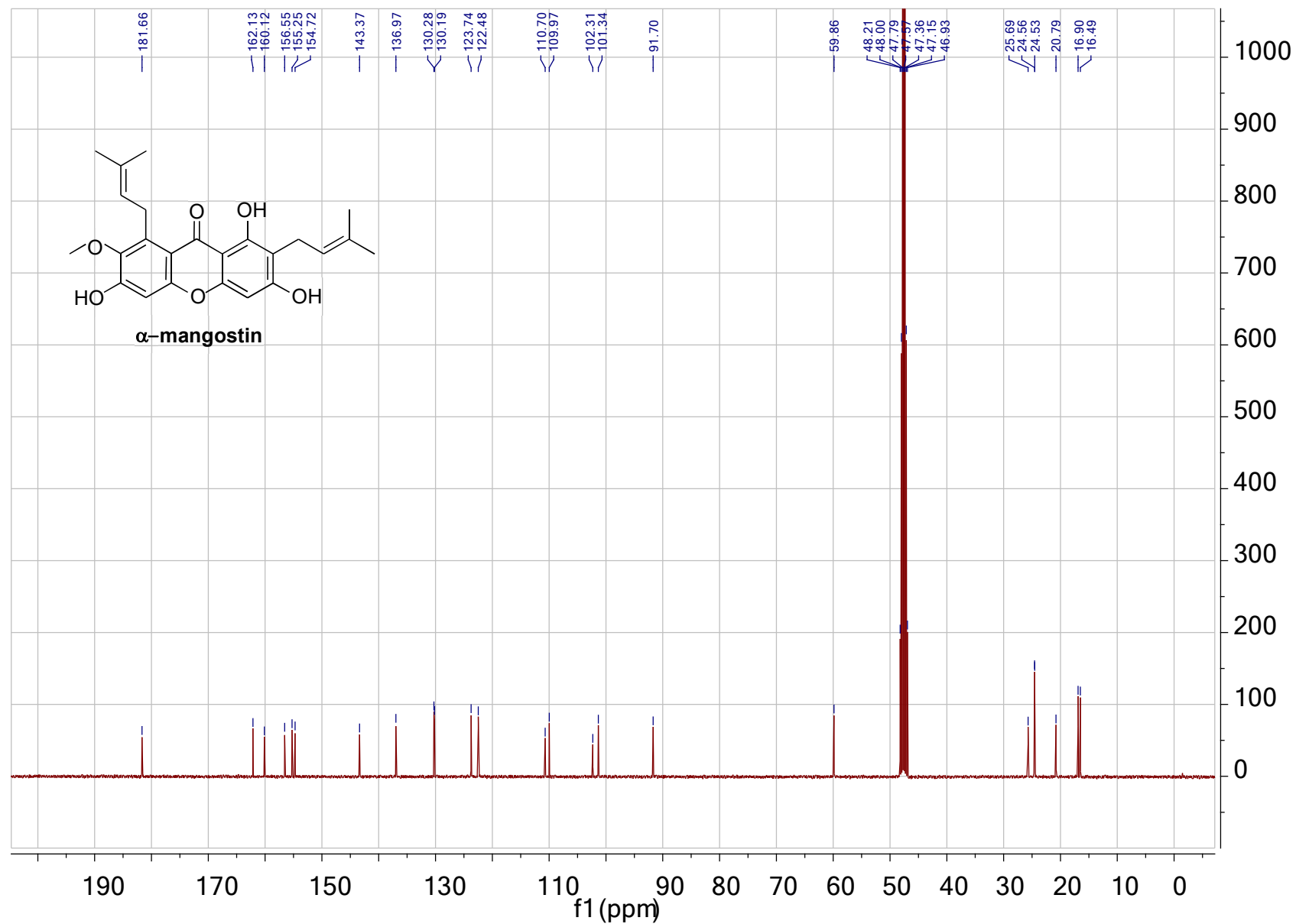
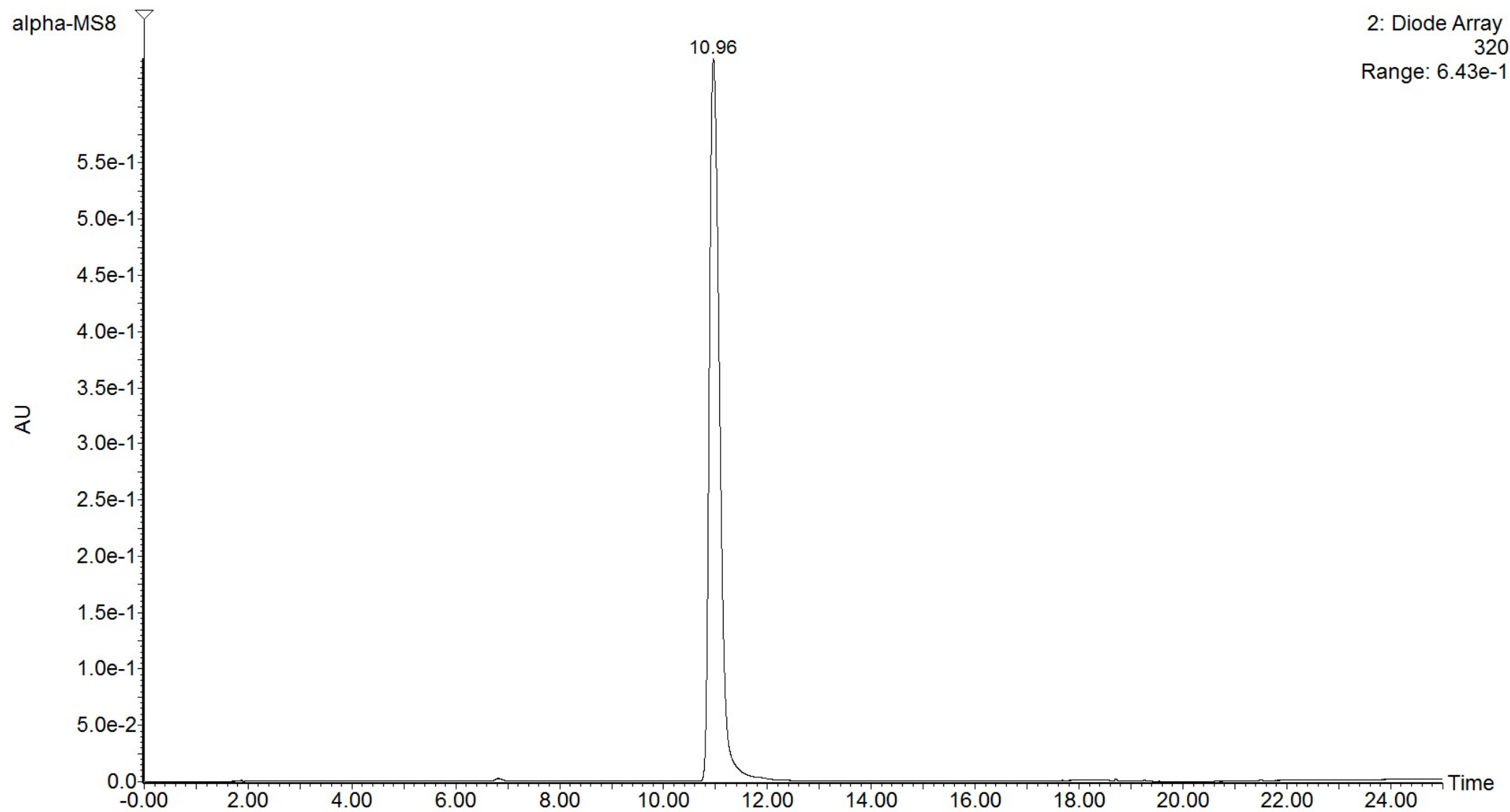


Figure S2. The  $^{13}\text{C}$  NMR spectrum of  $\alpha$ -mangostin ( $\text{CD}_3\text{OD}$ , 100 MHz)



**Figure S3. The UPLC UV chromatogram of  $\alpha$ -mangostin (UV wavelength 320nm)**

alpha-MS8 647 (11.100)

1: TOF MS ES+  
3.72e5

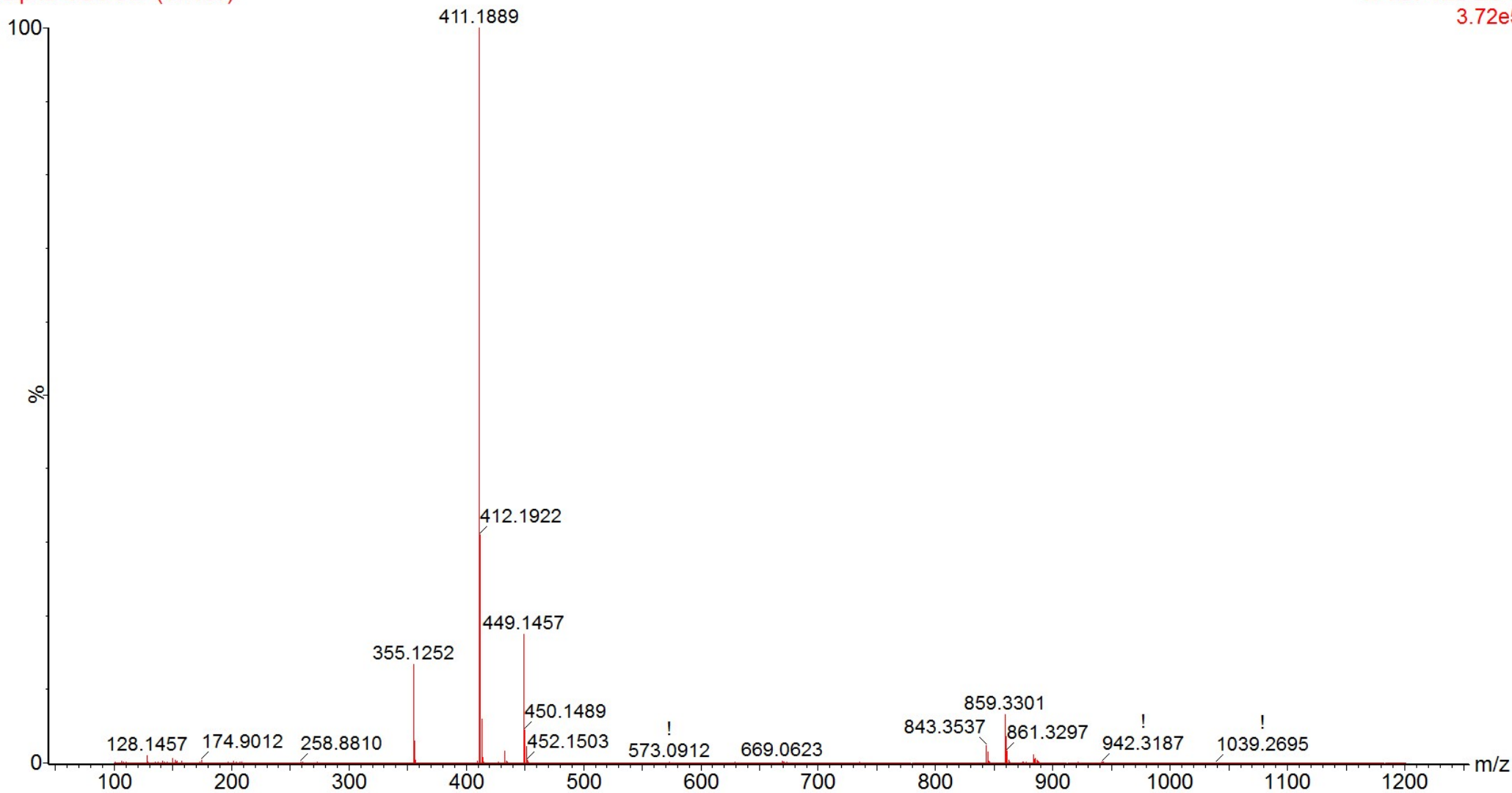


Figure S4. The MASS spectra of  $\alpha$ -mangostin