

Towards Developing Novel Prostate Cancer Recurrence Suppressors: Acute Toxicity of Pseurotin A, an Orally Active PCSK9 Axis-Targeting Small-Molecule in Swiss albino Mice

Oliver C. McGehee ^{1,2} Hassan Y. Ebrahim ^{1,2} Ashkan H. Rad ¹, Khaldoun S. Abdelwahed ¹, Ethar A. Mudhish ¹, Judy A. King ³, Iman E. Helal ^{1,4}, Sharon A. Meyer ¹ and Khalid A. El Sayed ^{1,*}

¹ School of Basic Pharmaceutical and Toxicological Sciences, College of Pharmacy, University of Louisiana at Monroe, 1800 Bienville Drive, Monroe, LA 71201, USA; mcgeheoc@warhawks.ulm.edu (O.M.); ebrahim@ulm.edu (H.E.); hassankhanirada@warhawks.ulm.edu (A.R.); abdelwks@warhawks.ulm.edu (K.A.); mudhishea@warhawks.ulm.edu (E.M.); dr_eman_ezzat@mans.edu.eg (I.H.); meyer@ulm.edu (S.M.)

² Both coauthors contributed equally.

³ Department of Integrated Medical Education, Thomas F. Frist, Jr. College of Medicine, Belmont University, 1900 Belmont Boulevard, Nashville, TN 37212, USA; judy.king@belmont.edu

⁴ Current address: Department of Pharmacognosy, Faculty of Pharmacy, Mansoura University, Mansoura 35516, Egypt

* Correspondence: elsayed@ulm.edu

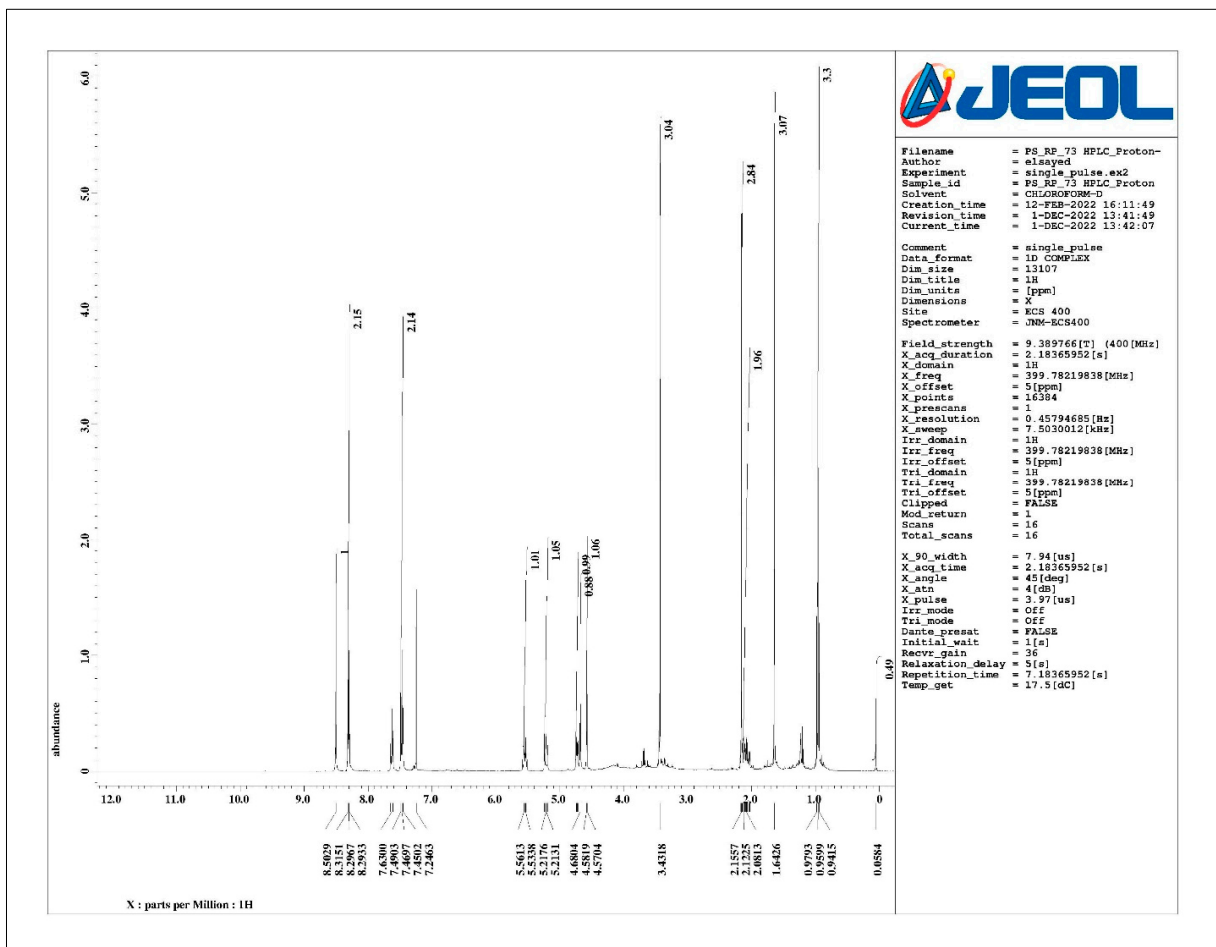
Supplementary Material

Figure S1. NMR spectral data for isolated pseurotin A. (a) ¹H NMR spectrum of pseurotin A in CDCl₃ recorded at 400 MHz. (b) ¹³C NMR spectrum of pseurotin A in CDCl₃ recorded at 100 MHz.

Figure S2. High-performance liquid chromatography (HPLC) chromatogram-aided purity assessment of isolated pseurotin A. Instrument: SHIMATZU; column: COSMOSIL C-18 (4.6 ID × 250 mm); mobile phase: 0.1 % HCOOH in water: acetonitrile (60:40) isocratic; UV detection: λ=254 nm.

Figure S3. High-performance liquid chromatography (HPLC) chromatogram evidencing the first detection of pseurotin A in Swiss albino mice plasma.

(a)



(b)

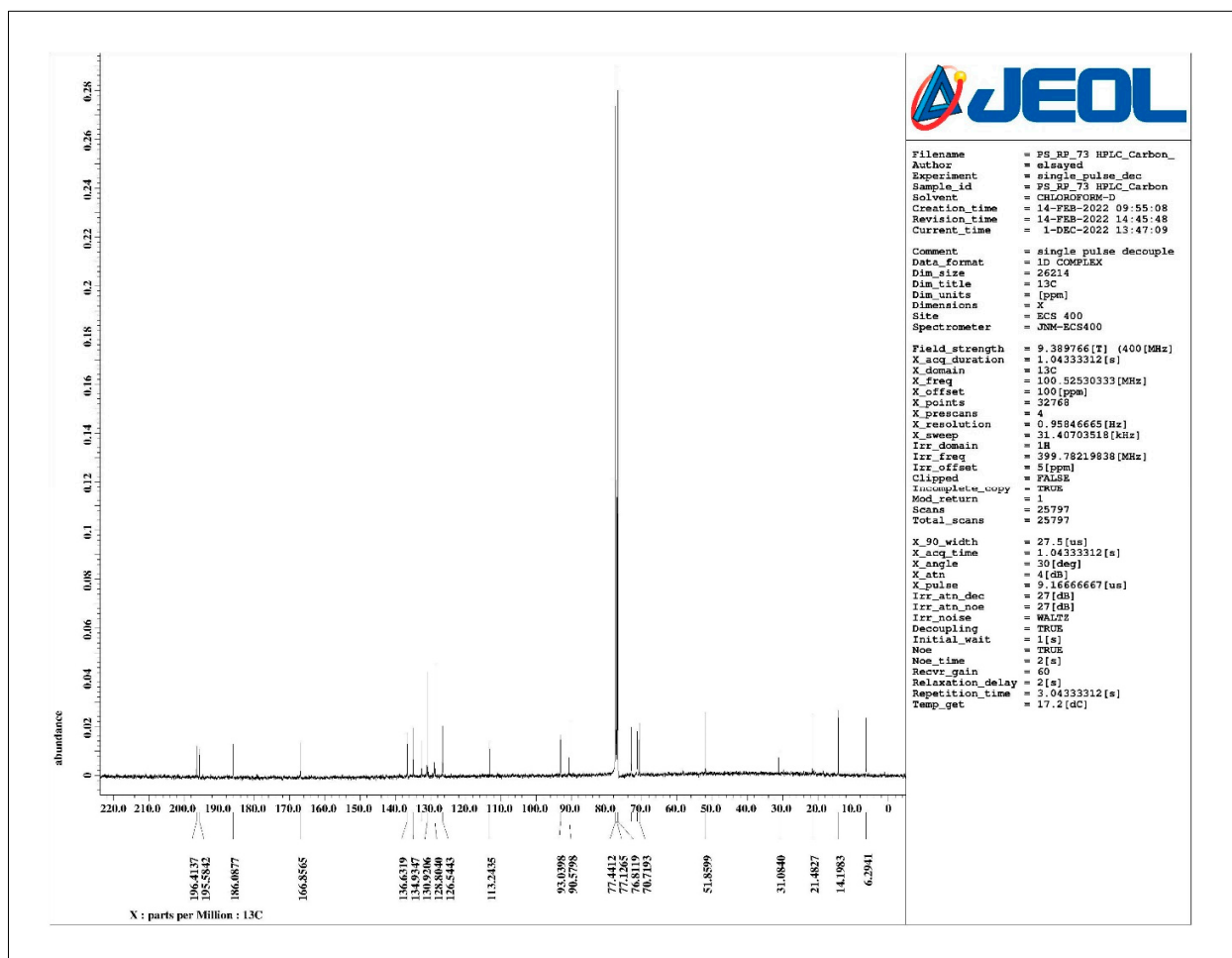


Figure S1. NMR spectra data for isolated pseurotin A. (a) ^1H NMR spectrum of pseurotin A in CDCl_3 recorded at 400 MHz. (b) ^{13}C NMR spectrum of pseurotin A in CDCl_3 recorded at 100 MHz.

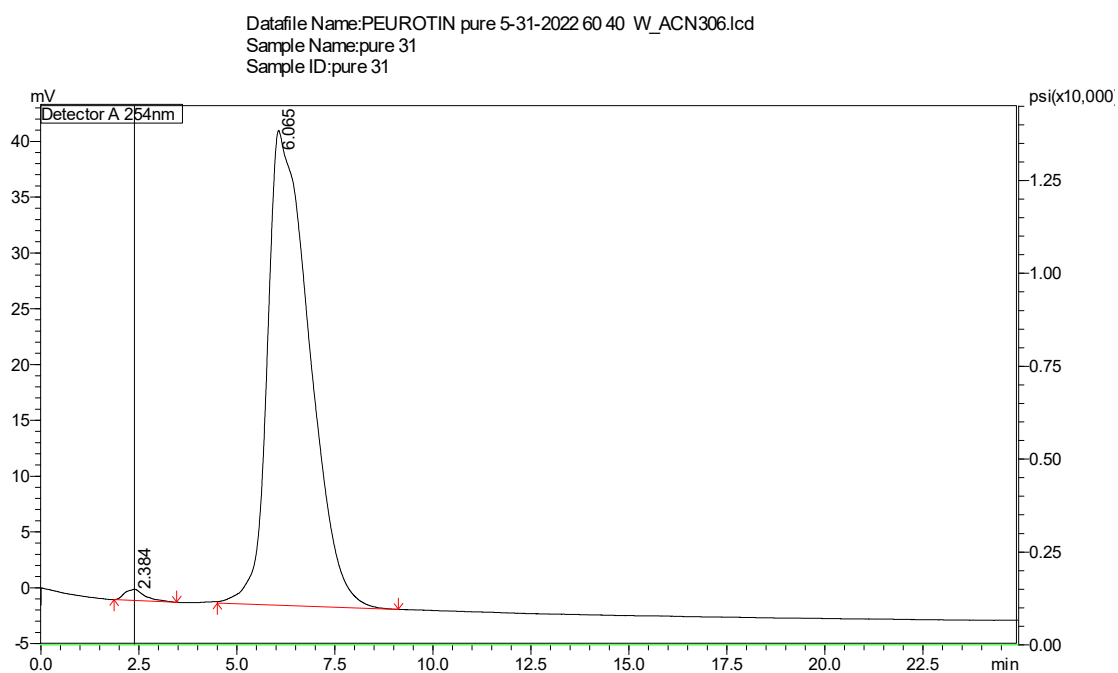
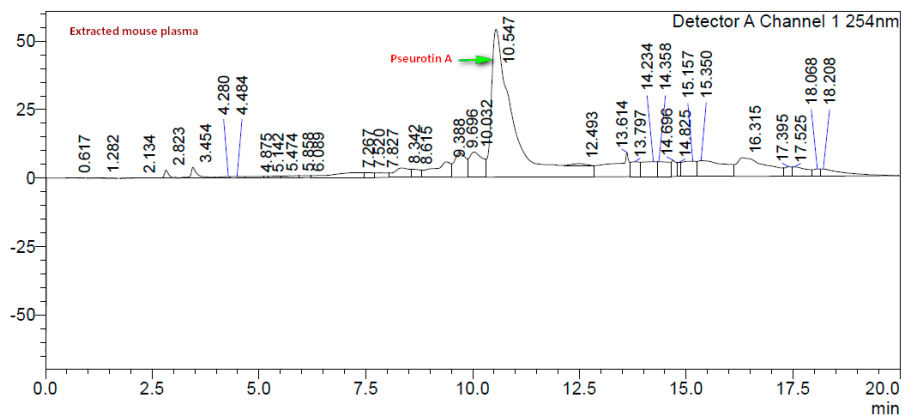


Figure S2. High-performance liquid chromatography (HPLC) chromatogram-aided purity assessment of isolated pseurotin A. Instrument: SHIMADZU; column: COSMOSIL C-18 (4.6 ID × 250 mm); mobile phase: 0.1 % HCOOH in water: acetonitrile (60:40) isocratic; UV detection: $\lambda=254$ nm.

<Chromatogram>

mV



H₂O (0.1 % HCOOH)/ACN gradient elution

Figure S3. High-performance liquid chromatography (HPLC) chromatogram evidencing the first detection of pseurotin A in Swiss albino mice serum. Instrument: SHIMADZU; column: COSMOSIL C-18 (4.6 ID × 250 mm); mobile phase: 0.1 % HCOOH in water: acetonitrile (60:40) isocratic; UV detection: $\lambda=254$ nm.