

# Therapeutic study of cinnamic acid derivative for oxidative stress ablation: The computational and experimental answers

Oluwafemi Adeleke Ojo <sup>1,2\*</sup>, Akingbolabo Daniel Ogunlakin <sup>1,2</sup>, Rotdelmwa Filibis Maimako <sup>3</sup>, Gideon Ampoma Gyebi<sup>4</sup>, Christopher Busayo Olowosoke <sup>5,6</sup>, Odunayo Anthonia Taiwo <sup>7</sup>, Tobiloba Christiana Elebiyo <sup>3</sup>, David Adeniyi <sup>1,2</sup>, Bolaji David <sup>1,2</sup>, Matthew Iyobhebhe <sup>3</sup>, Juliana Bunmi Adetunji<sup>8</sup>, Damilare IyinKristi Ayokunle <sup>9</sup>, Adebola Busola Ojo <sup>10</sup>, Ramzi A. Mothana<sup>11</sup> Abdullah R. Alanzi <sup>11</sup>

<sup>1</sup> Bowen University SDG 03 (Good Health and Wellbeing Research Cluster), Nigeria.

<sup>2</sup> Phytomedicine, Molecular Toxicology, and Computational Biochemistry Research Laboratory (PMTCB-RL), Department of Biochemistry, Bowen University, Iwo, 232101, Nigeria

<sup>3</sup> Department of Biochemistry, Landmark University, Omu-Aran, Nigeria; RFM: maimako.rotdelmwa@lmu.edu.ng; MI: iyobhebhematthew@gmail.com

<sup>4</sup> Natural products and Structural (Bio-Chem)-Informatics Research Laboratory (NpsBC-RI), Department of Biochemistry, Bingham University, Karu 961105, Nigeria; gideonagyebi@gmail.com

<sup>5</sup> Department of Biotechnology, Federal University of Technology, Akure. PMB 704 Futa Road, Ondo, Nigeria, CBO: olowosokechris@gmail.com

<sup>6</sup> Department of Biotechnology, Chrisland University, Abeokuta, Nigeria

<sup>7</sup> Department of Biochemistry, Chrisland University, Abeokuta, Nigeria; odunayotaiwo25@gmail.com

<sup>8</sup> Department of Biochemistry, Osun State University, Osogbo, Nigeria; JBA: adetunjibj@gmail.com

<sup>9</sup> Department of Pure and Applied Biology, Bowen University, Iwo, Nigeria, DIA: opeoluwa02@gmail.com

<sup>10</sup> Department of Biochemistry, Ekiti State University, Ado-Ekiti, Nigeria; ABO: adebolaojo04@gmail.com

<sup>11</sup> Department of Pharmacognosy, College of Pharmacy, King Saud University, P.OBox 2457, Riyadh 11451, Saudi Arabia.

\* Correspondence: oluwafemiadeleke08@gmail.com; Tel.: +2347037824647

File: KAD-07 Date Run: 02-06-2019 (Time Run: 15:46:42)  
Sample: DANIEL / DR. FARZANA SHAHEEN  
Instrument: JEOL JMS600H-1

Ionization mode: EI+

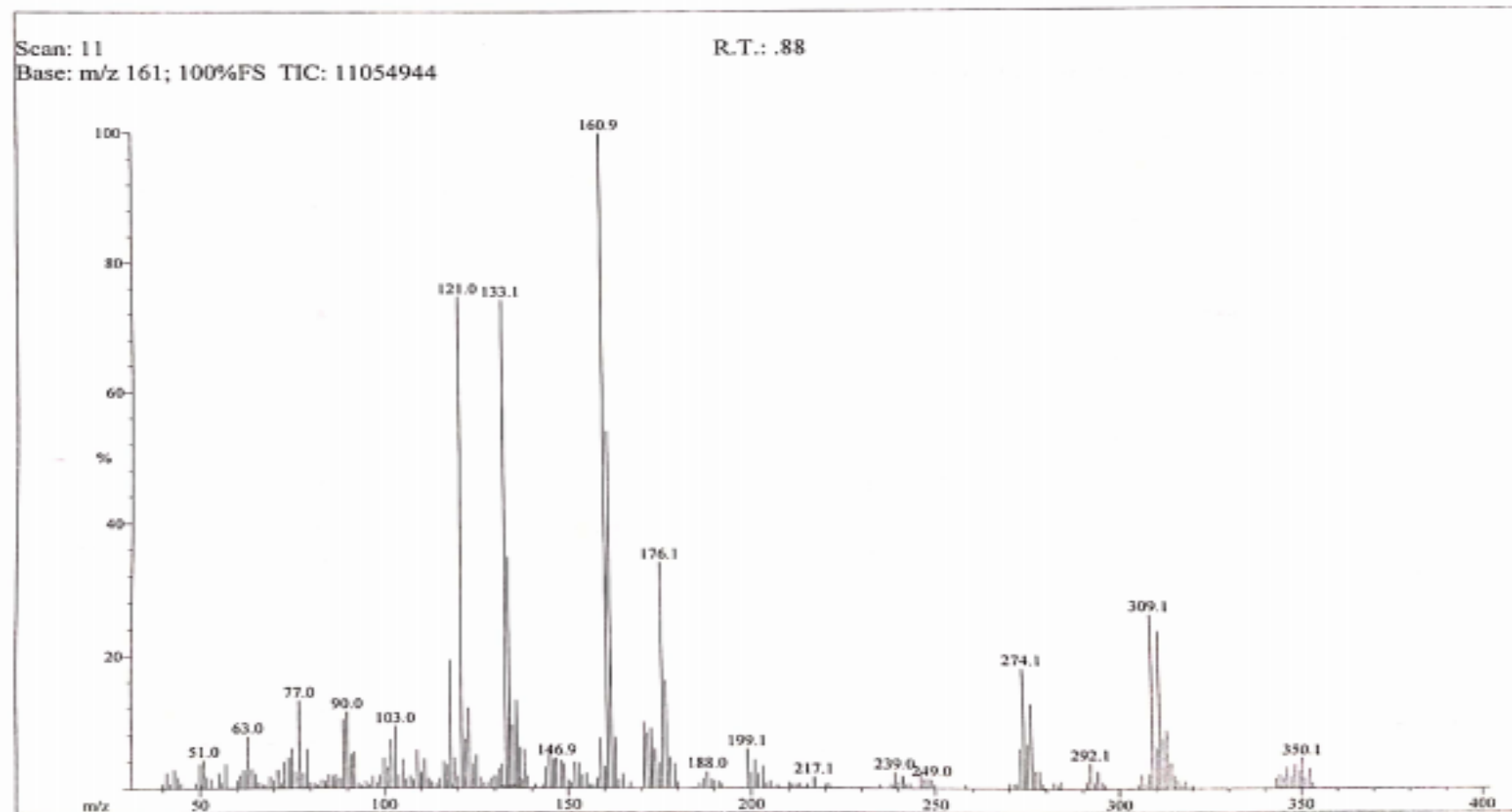
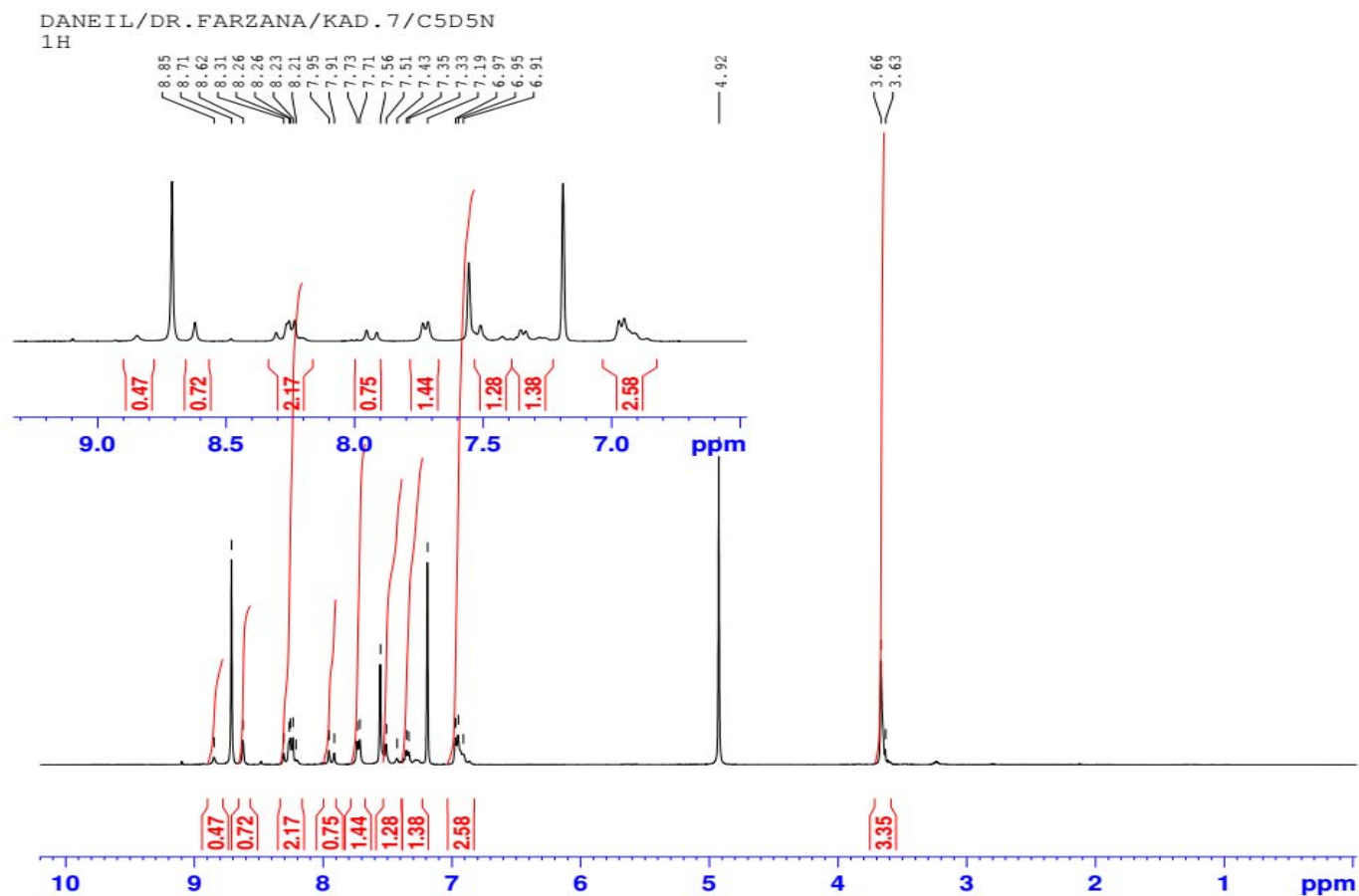


Figure S1: Mass spectroscopy of KAD-7



Current Data Parameters  
NAME KAD compds  
EXPNO 7  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20190212  
Time 8.29 h  
INSTRUM AVNeo\_400  
PROBHD Z3756\_0202 (PH)  
PULPROG zg30  
TD 32768  
SOLVENT Pyr  
NS 128  
DS 0  
SWH 7812.500 Hz  
FIDRES 0.476837 Hz  
AQ 2.0971520 sec  
RG 101  
DW 64.000 usec  
DE 6.50 usec  
TE 298.0 K  
D1 1.50000000 sec  
TD0 1  
SFO1 399.9331994 MHz  
NUC1 1H  
P0 5.00 usec  
P1 15.00 usec  
PLW1 8.02390003 W

F2 - Processing parameters  
SI 32768  
SF 399.9306022 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00

Figure S2:  $^1\text{H}$  NMR of KAD-7