Electronic Supplementary Material (ESI) for RSC Advances.

Synthesis of Amantadine clubbed *N*-Aryl amino thiazoles as potent Urease, α-Amylase & α-Glucosidase inhibitors and their kinetic and molecular docking studies.

Synthesis of Amantadine clubbed *N*-Aryl amino thiazoles as potent Urease, α-Amylase & α-Glucosidase inhibitors, kinetic and molecular docking studies.

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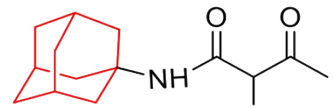
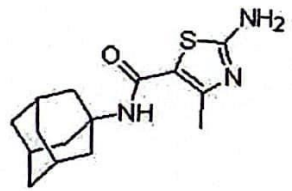


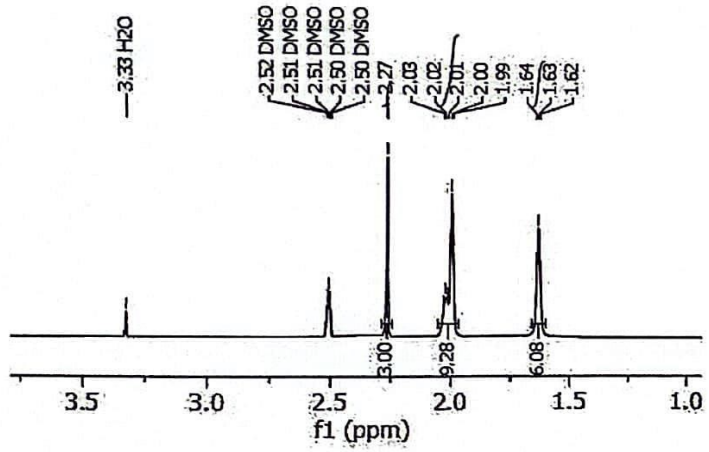
4

Chemical Formula: $C_{14}H_{20}BrNO_2$
Exact Mass: 313.07
Molecular Weight: 314.22
m/z: 313.07 (100.0%), 315.07 (97.3%), 314.07 (15.1%), 316.07 (14.7%), 315.07 (1.1%), 317.07 (1.0%)
Elemental Analysis: C, 53.51; H, 6.42; Br, 25.43; N, 4.46; O, 10.18

Fragmentation pattern:

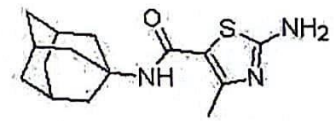
ADTN.3.fid


NH2
S
O
N
NH


3.33 H2O
2.52 DMSO
2.51 DMSO
2.51 DMSO
2.50 DMSO
2.50 DMSO
2.27
2.03
2.02
2.01
2.00
1.99
1.64
1.63
1.62
3.00
9.28
6.08
3.5
3.0
2.5
2.0
1.5
1.0
f1 (ppm)

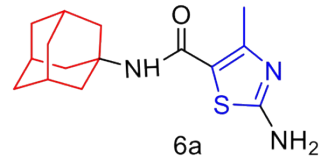
7.22
6.63
3.33 H2O
2.52 DMSO
2.51 DMSO
2.51 DMSO
2.50 DMSO
2.50 DMSO
2.27
2.03
2.02
2.01
2.00
1.99
1.64
1.63
1.62
1.89
1.05
3.00
9.28
6.08
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
-1
-2
-3
-4
f1 (ppm)

ADTN.4.fid



167.25
161.46
151.01
114.70
51.47
41.03
40.12 DMSO
39.91 DMSO
39.70 DMSO
39.49 DMSO
39.28 DMSO
39.07 DMSO
38.87 DMSO
36.04
28.84
17.07

210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 -10
f1 (ppm)

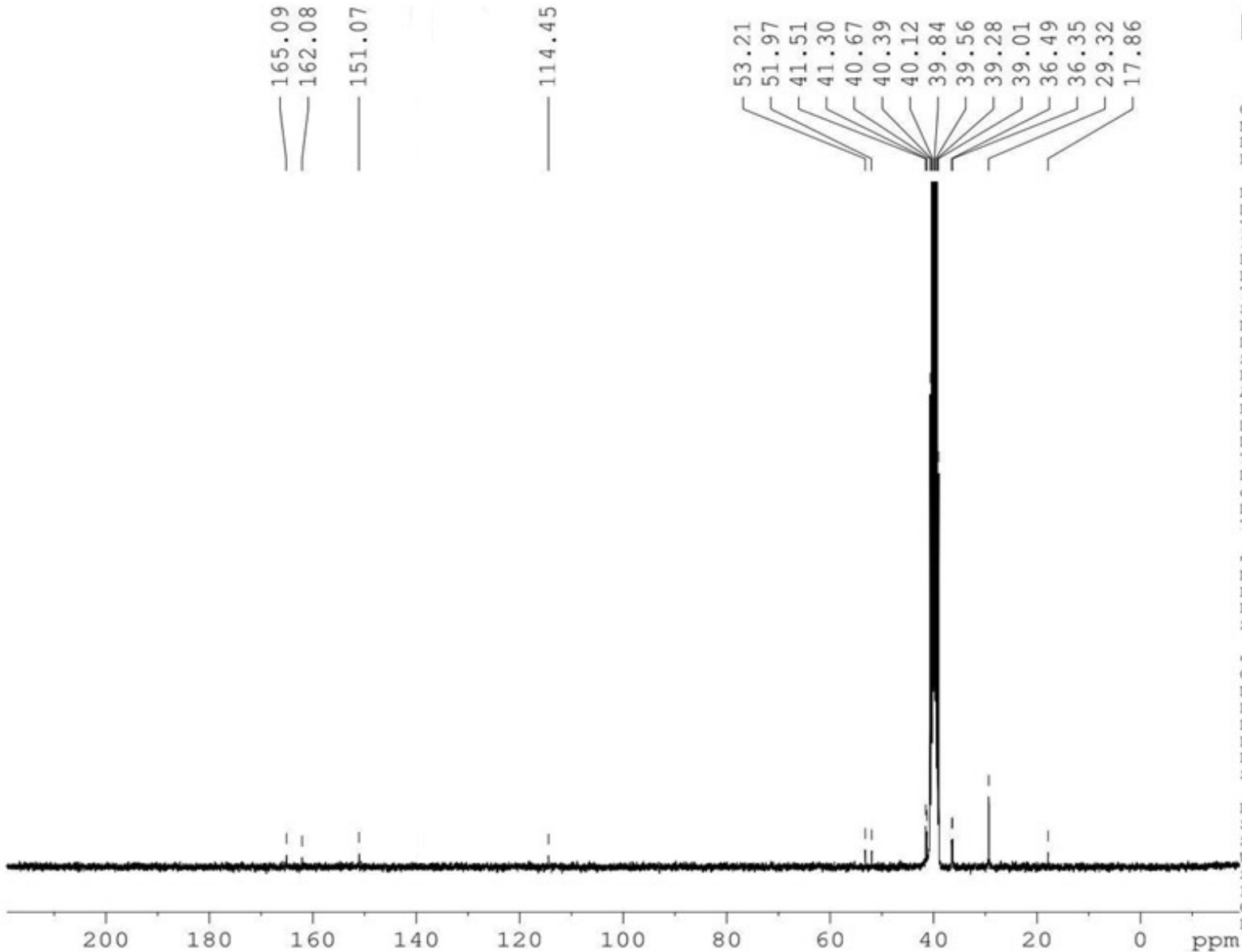


6a

Chemical Formula: $C_{15}H_{21}N_3OS$
Exact Mass: 291.14
Molecular Weight: 291.41
m/z: **291.14** (100.0%), 292.14 (16.2%), 293.14 (4.5%), 293.15 (1.2%), 292.14 (1.1%)
Elemental Analysis: C, 61.82; H, 7.26; N, 14.42; O, 5.49; S, 11.00

Fragmentation pattern:

DR.AAMER SAEED/FATIMA/TH-11_13CNMR_DMSO



BRUKER

Current Data Parameters
NAME TH-11_13CNMR_DMSO
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20230619
Time 9.30
INSTRUM spect
PROBHD 5 mm BBO BB-1H
PULPROG zgpg30
TD 35968
SOLVENT DMSO
NS 18432
DS 0
SWH 17985.611 Hz
FIDRES 0.500045 Hz
AQ 0.9999604 sec
RG 32768
DW 27.800 usec
DE 6.00 usec
TE 298.2 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1

======== CHANNEL f1 ========
NUC1 13C
P1 6.00 usec
PL1 -5.00 dB
SFO1 75.4752953 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 2.00 dB
PL12 20.98 dB
PL13 20.00 dB
SFO2 300.1312005 MHz

F2 - Processing parameters
SI 32768
SF 75.4677490 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40