Electronic Supplementary Material (ESI) for RSC Advances.

Synthesis, characterization of quantum dots and their application as laser soft desorption/ionization for labile metallodrug analysis: Antibacterial Activity

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Figure captions of supporting file

Fig. S1: LDI-MS spectra of (A) ponstel drug, (B) Cu(II) complex, and (C) Fe(III) complex (C).

Fig. S2: MALDI-MS spectra using 2,5-DHB matrix. (A) ponstel drug, (B) Cu(II) complex, (C) Fe(III) complex.

Fig.S3: QALDI-MS spectra of Fe(III)-Ponstel complex. Structure and peaks assignments are recorded in the inset.

Fig. S4: Biological assay at 24h for *Pseudomonas aeruginosa.*

Fig. S5: Biological assay at 24h for *Staphylococcus aureus*.

Figure S1

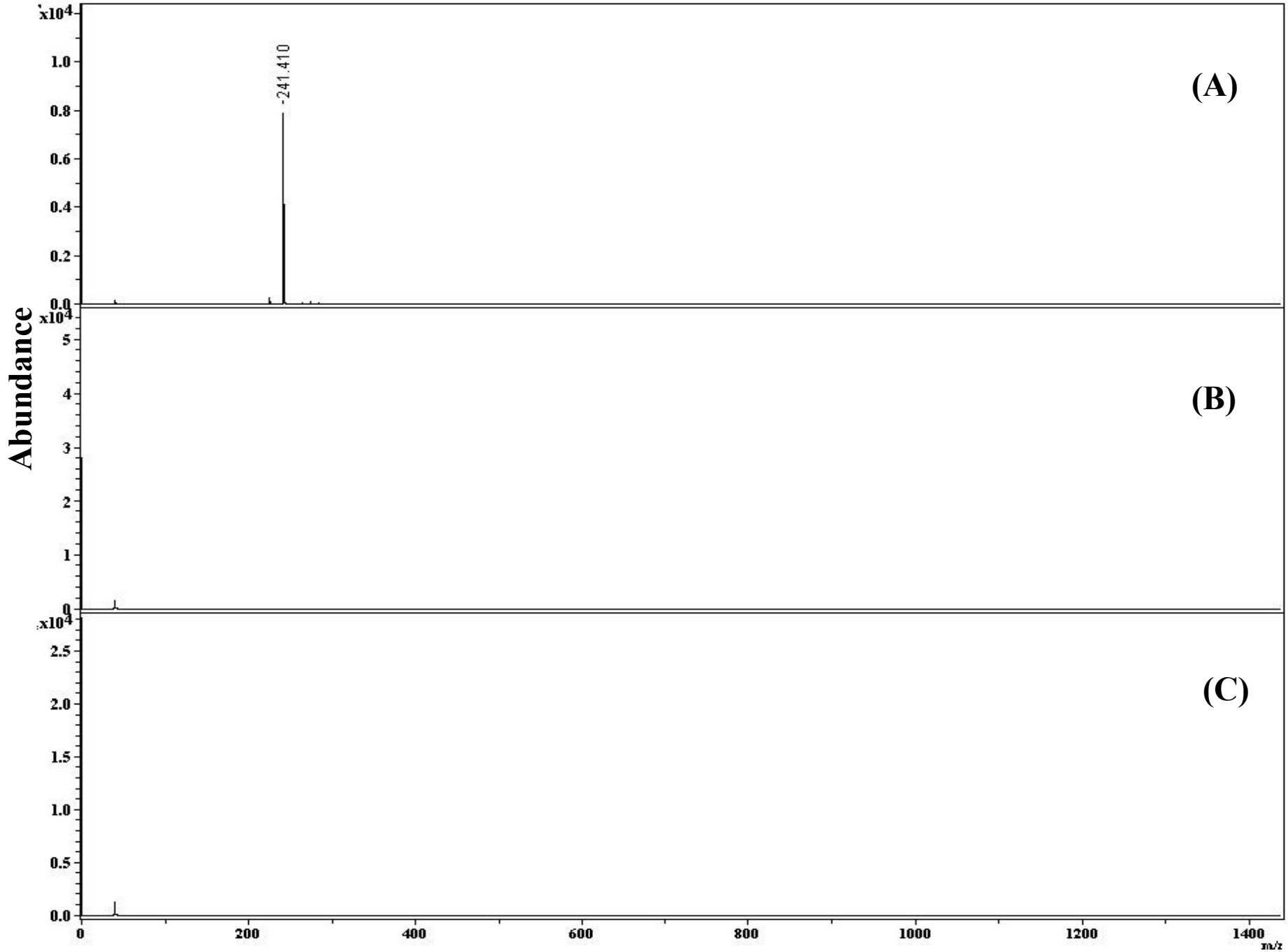
Abundance
x10^4
1.0
0.8
0.6
0.4
0.2
0.0
-241.410
(A)
x10^4
5
4
3
2
1
0
(B)
x10^4
2.5
2.0
1.5
1.0
0.5
0.0
(C)
0
200
400
600
800
1000
1200
1400
m/z

Figure S2

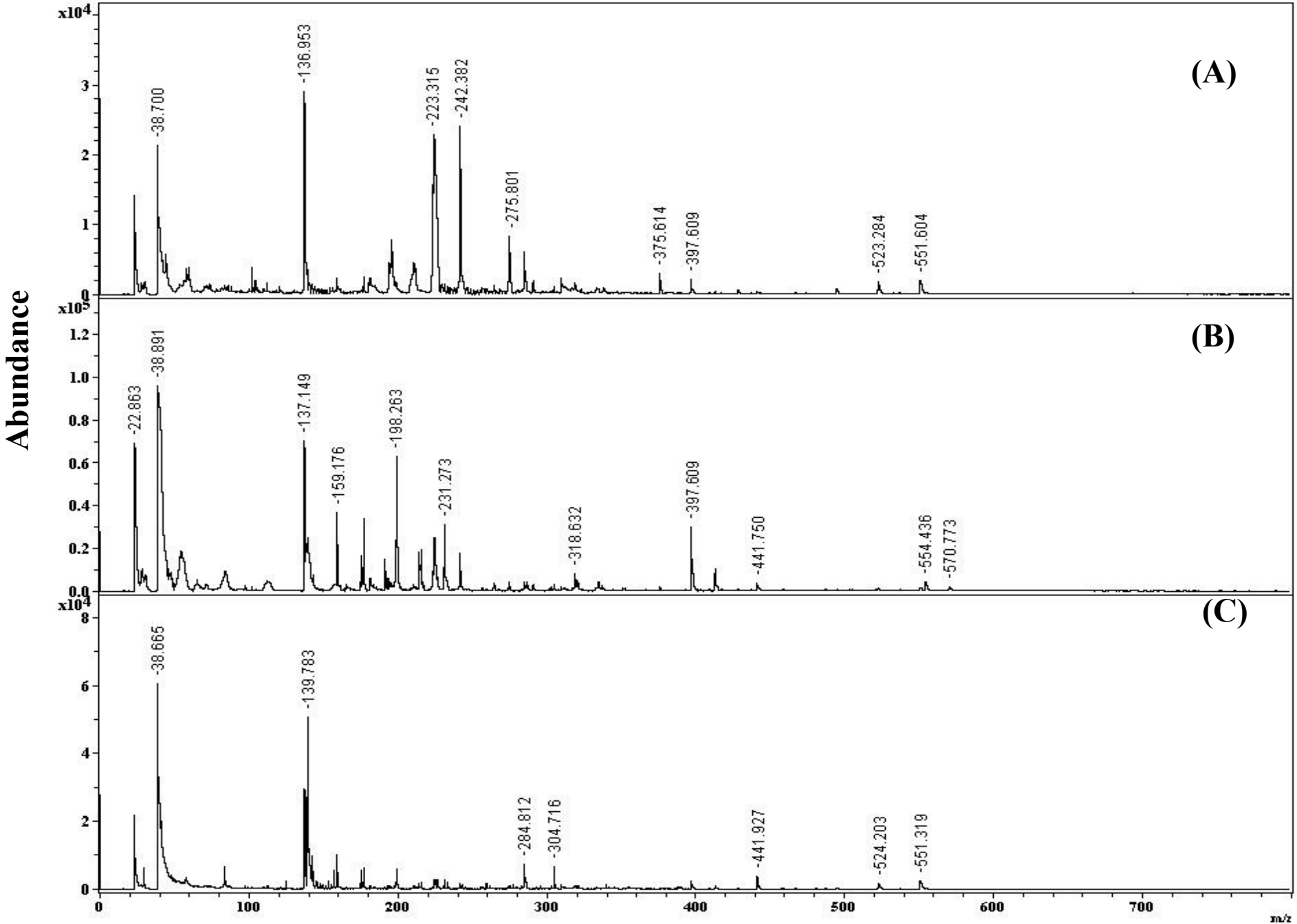
Abundance
(A)
x10^4
-38.700
-136.953
-223.315
-242.382
-275.801
-375.614
-397.609
-523.284
-551.604
(B)
x10^5
-22.863
-38.891
-137.149
-159.176
-198.263
-231.273
-318.632
-397.609
-441.750
-554.436
-570.773
(C)
x10^4
-38.665
-139.783
-284.812
-304.716
-441.927
-524.203
-551.319
m/z

Figure S3

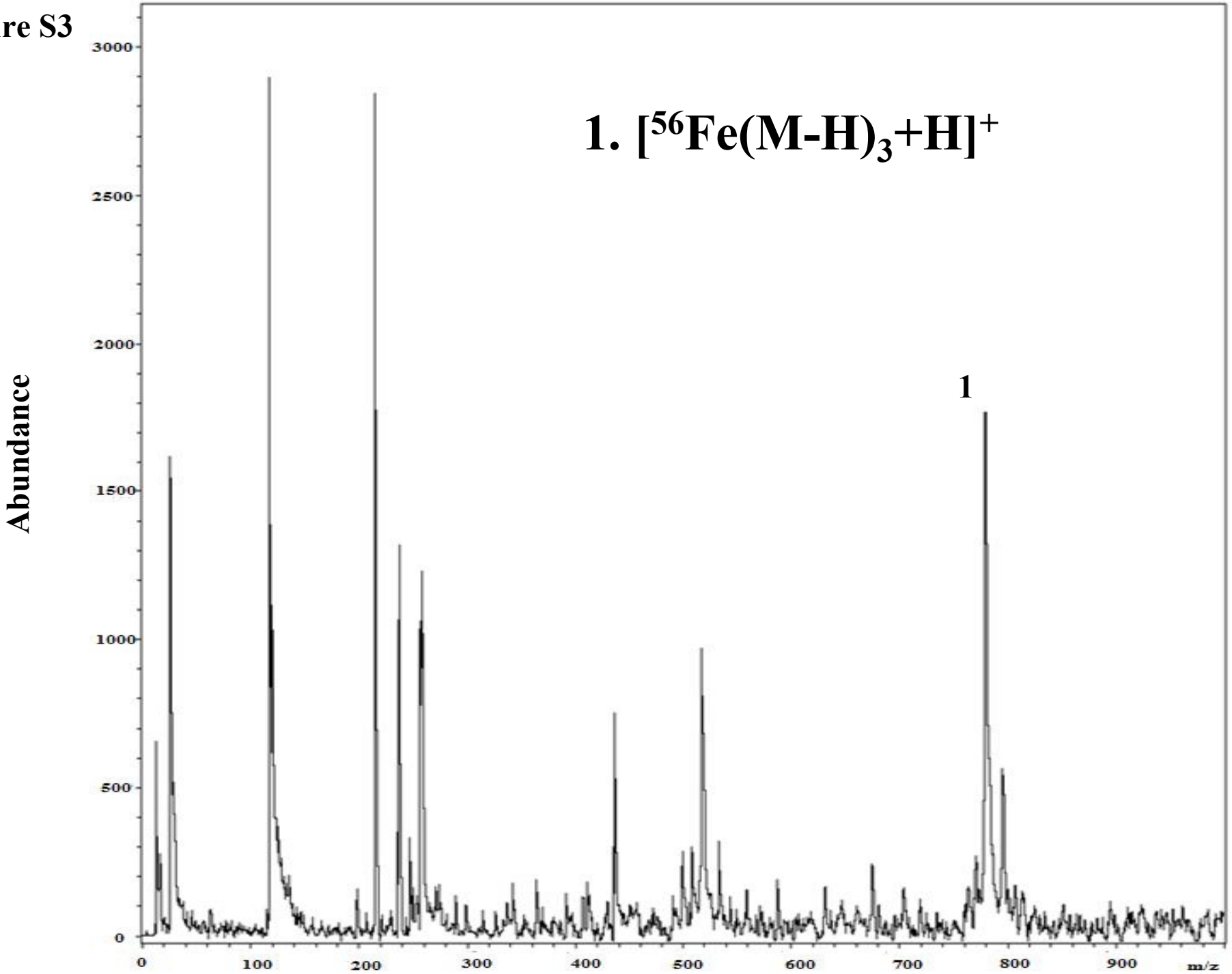
1. [56Fe(M-H)3+H]+
1
Abundance
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
m/z

Figure S4

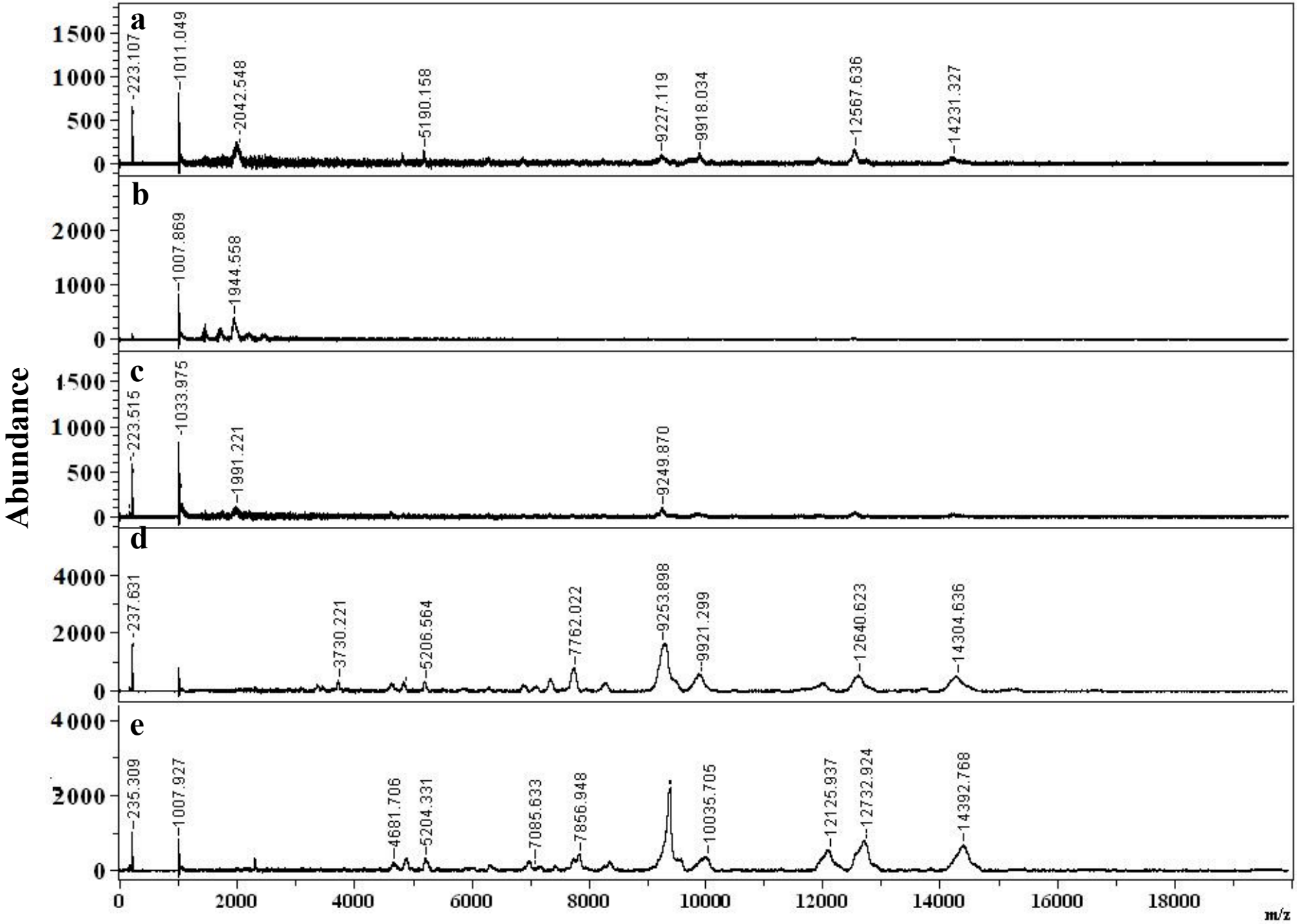
a
1500
1000
500
0
223.107
1011.049
2042.548
5190.158
9227.119
9918.034
12567.636
14231.327
b
2000
1000
0
1007.869
1944.558
c
1500
1000
500
0
223.515
1033.975
1991.221
9249.870
d
4000
2000
0
237.631
3730.221
5206.564
7762.022
9253.898
9921.299
12640.623
14304.636
e
4000
2000
0
235.309
1007.927
4681.706
5204.331
7085.633
7856.948
10035.705
12125.937
12732.924
14392.768
Abundance
0
2000
4000
6000
8000
10000
12000
14000
16000
18000
m/z

Figure S5

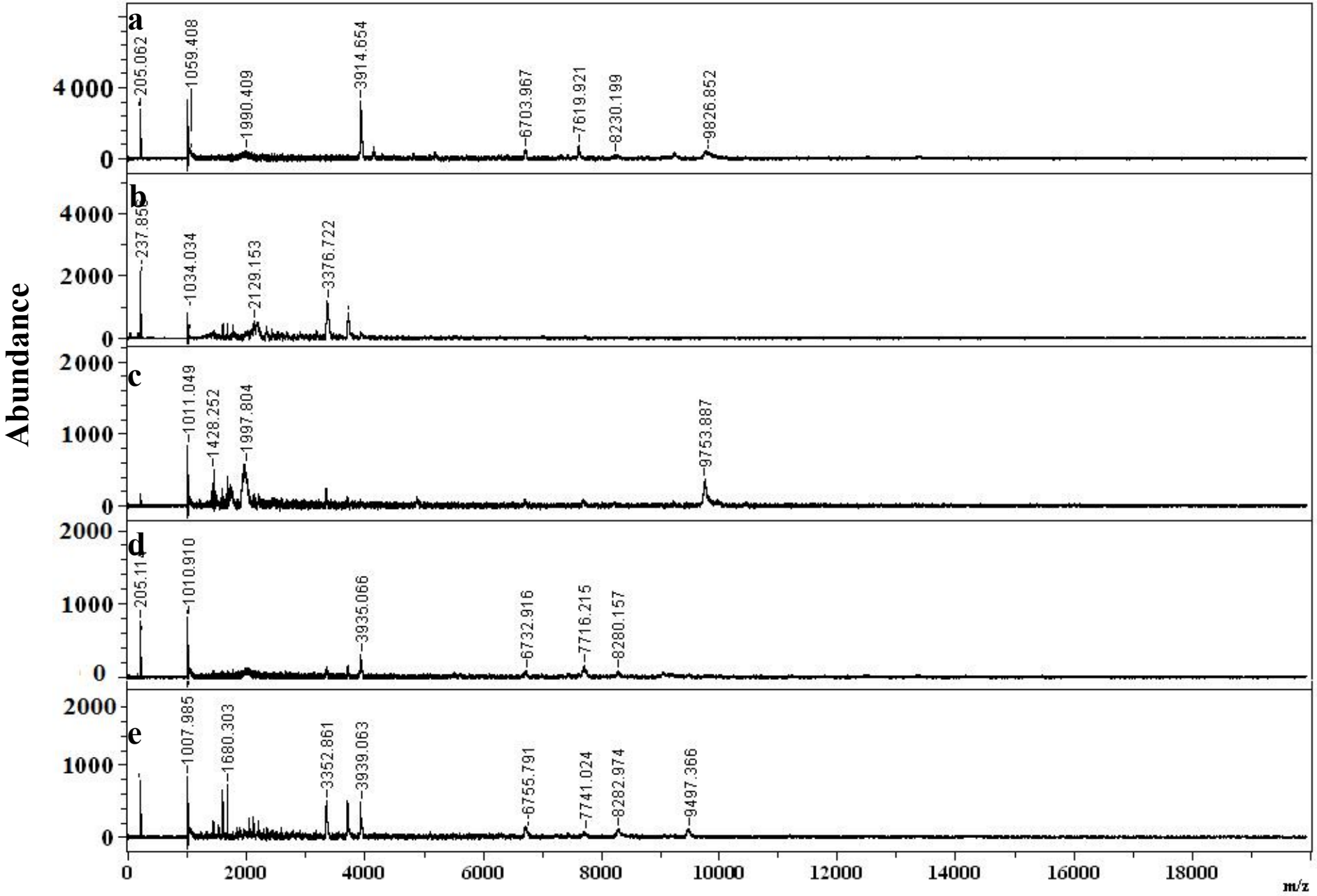
a
205.062
1059.408
1990.409
3914.654
6703.967
7619.921
8230.199
9826.852
b
237.859
1034.034
2129.153
3376.722
c
1011.049
1428.252
1997.804
9753.887
d
205.114
1010.910
3935.066
6732.916
7716.215
8280.157
e
1007.985
1680.303
3352.861
3939.063
6755.791
7741.024
8282.974
9497.366
Abundance
m/z
0
2000
4000
6000
8000
10000
12000
14000
16000
18000

Table S1: Observed mass peaks of ponstel drug, Cu(II), and Fe(III) complexes with the relevant assignments.

m/z	**Assignment**
242.1	$[M+H]^+$
224.3	$[(M-H_2O)+H]^+$
265.1	$[M+Na]^+$
281.1	$[M+Na]^+$
483.2	$[2M+H]^+$
465.0	$[2M-H_2O+H]^+$
137.0	$[2\text{-Aminobenzoic acid}+H]^+$
543.0	$[^{63}Cu(M-H)_2+H]^+$
528.0	$[^{63}Cu(M-H)_2-CH_3+H]^+$
777.0	$[^{56}Fe(M-H)_3+H]^+$