Supporting Information

The effect of conjugation of ciprofloxacin and moxifloxacin with fatty acids on their antibacterial and anticancer activity

Alicja Chrzanowska[1], Marta Struga[1], Piotr Roszkowski[2,*], Michał Koliński[3], Sebastian Kmiecik[4], Karolina Jałbrzykowska[1], Anna Zabost[5], Joanna Stefańska[6], Ewa Augustynowicz-Kopeć[5], Małgorzata Wrzosek[7], Anna Bielenica[1,*]

[1] Chair and Department of Biochemistry, Medical University of Warsaw, ul. Banacha 1, 02-097 Warsaw, Poland; achrzanowska@wum.edu.pl (A.Ch); mstruga@wum.edu.pl (M.S), kjalbrzykowska@wum.edu.pl (K.J.), abielenica@wum.edu,pl (A.B)

[2] Faculty of Chemistry, University of Warsaw, Pasteura 1, 02-093 Warszawa, Poland: roszkowski@chem.uw.edu.pl (P.R)

[3] Bioinformatics Laboratory, Mossakowski Medical Research Institute, Polish Academy of Sciences, 5 Pawinskiego St., 02-106 Warsaw, Poland; kolinski.michal@gmail.com (M.K.)

[4] Biological and chemical Research Centre, Faculty of Chemistry, University of Warsaw, 02-089 Warsaw, Poland; sebastian.kmiecik@gmail.com (S.K.)

[5] Department of Microbiology, National Tuberculosis and Lung Diseases Research Institute, 01-138 Warsaw, Poland, e.kopec@igichp.edu.pl (E.A-K), a.zabost@igichp.edu.pl (A.Z)

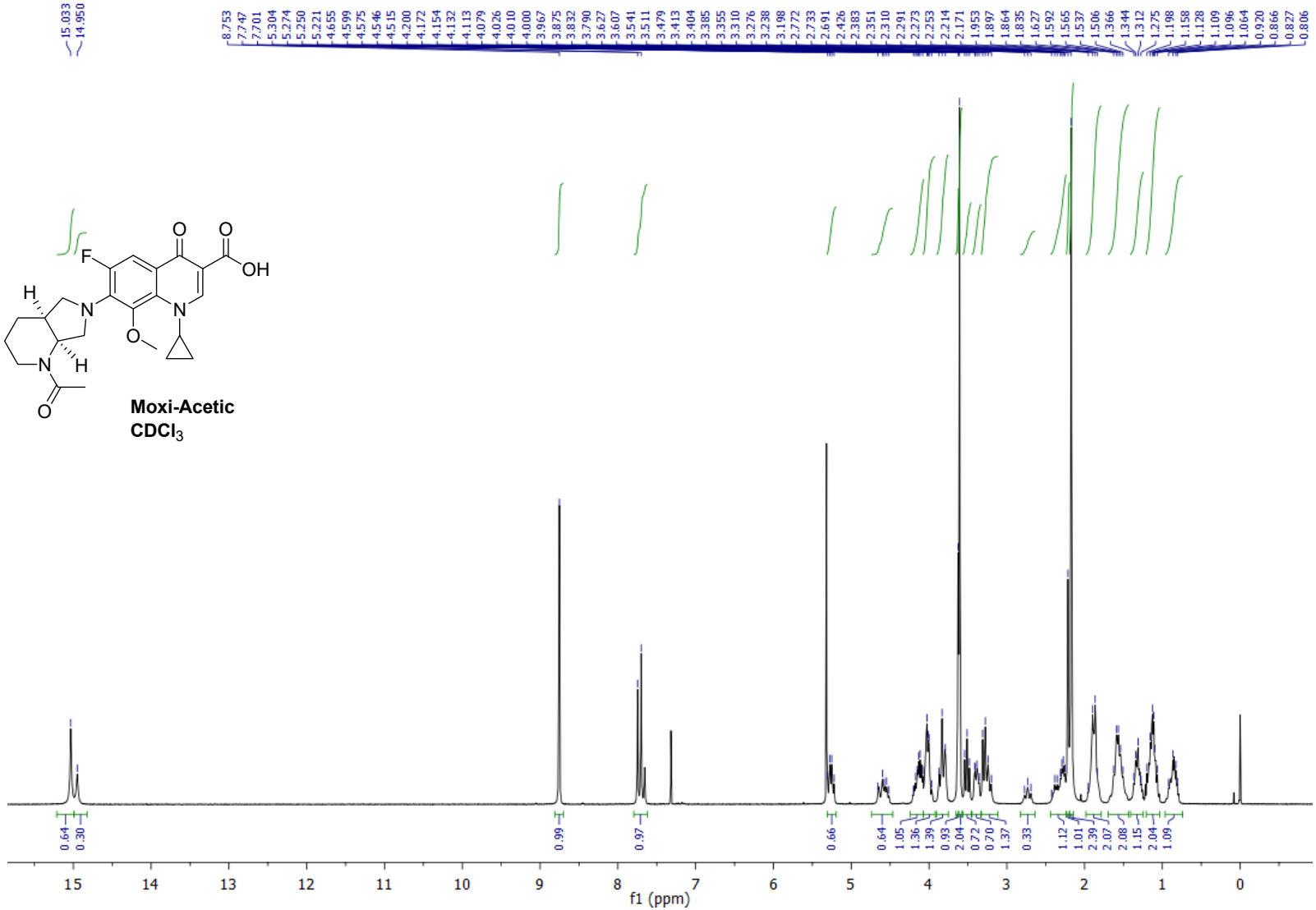
[6] Department of Pharmaceutical Microbiology, Centre for Preclinical Research, Medical University of Warsaw, 02-097 Warszawa, Poland; jstefanska@wum.edu.pl (J.S.)

[7] Department of Biochemistry and Pharmacogenomics, Faculty of Pharmacy, Medical University of Warsaw, 02-097 Warsaw, Poland: mwrzosek@wum.edu.pl (M.W)

[*]Corresponding authors: Anna Bielenica; abielenica@wum.edu.pl (biological activity), Piotr Roszkowski; roszkowski@chem.uw.edu.pl (chemistry)

Below ^{1}H and ^{13}C NMR spectra of synthesized amides of MXF are presented.

The NMR analysis shown that studied derivatives of MXF and fatty acids existed in solution as a rotamers mixture. Therefore, in description of NMR spectra the major form was marked as a R_A and minor form was marked as R_B. In $CDCl_3$ the ratio of R_A:R_B is about 2:1 and in a case when the signals in NMR spectra were appropriate separated remarks were added to description. Interestingly, the propagation of rotamers depended on solvent used in NMR analysis and in case of DMSO-d_6 the ratio of R_A:R_B is about 1:1.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OH
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N
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H
O
Moxi-Acetic
CDCl3
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0.30
0.99
0.97
0.66
0.64
1.05
1.36
1.39
0.93
2.04
0.72
0.70
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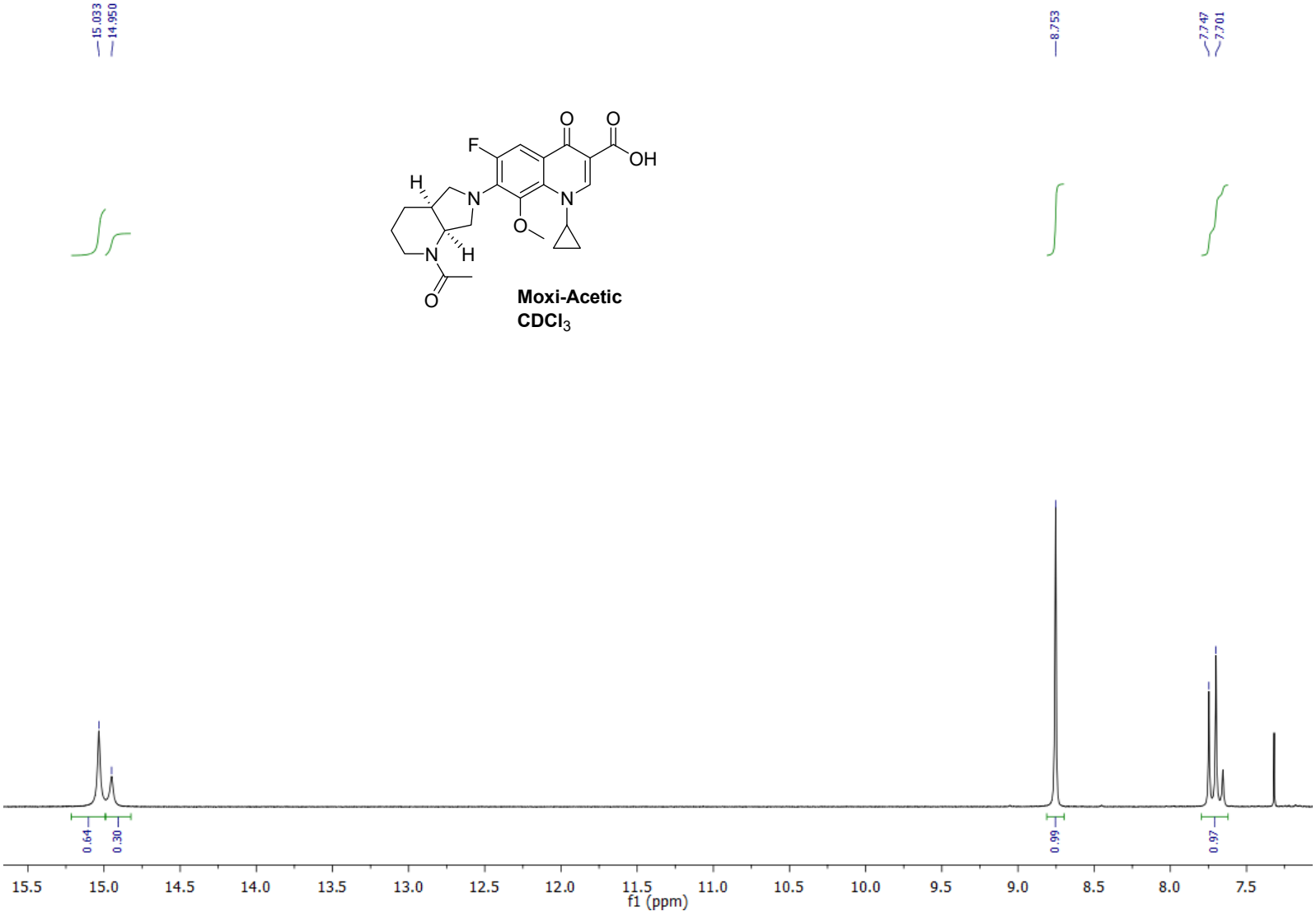
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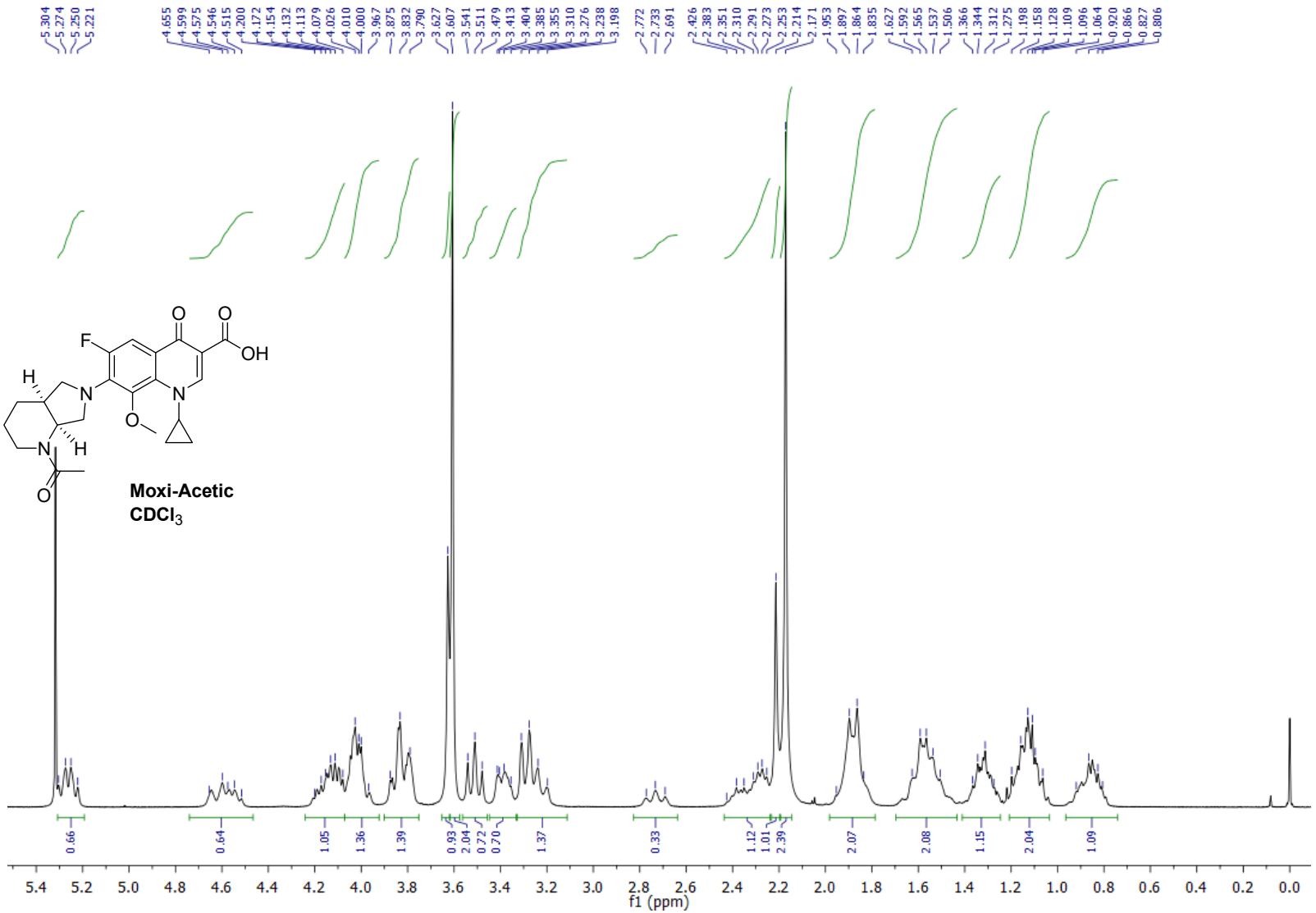
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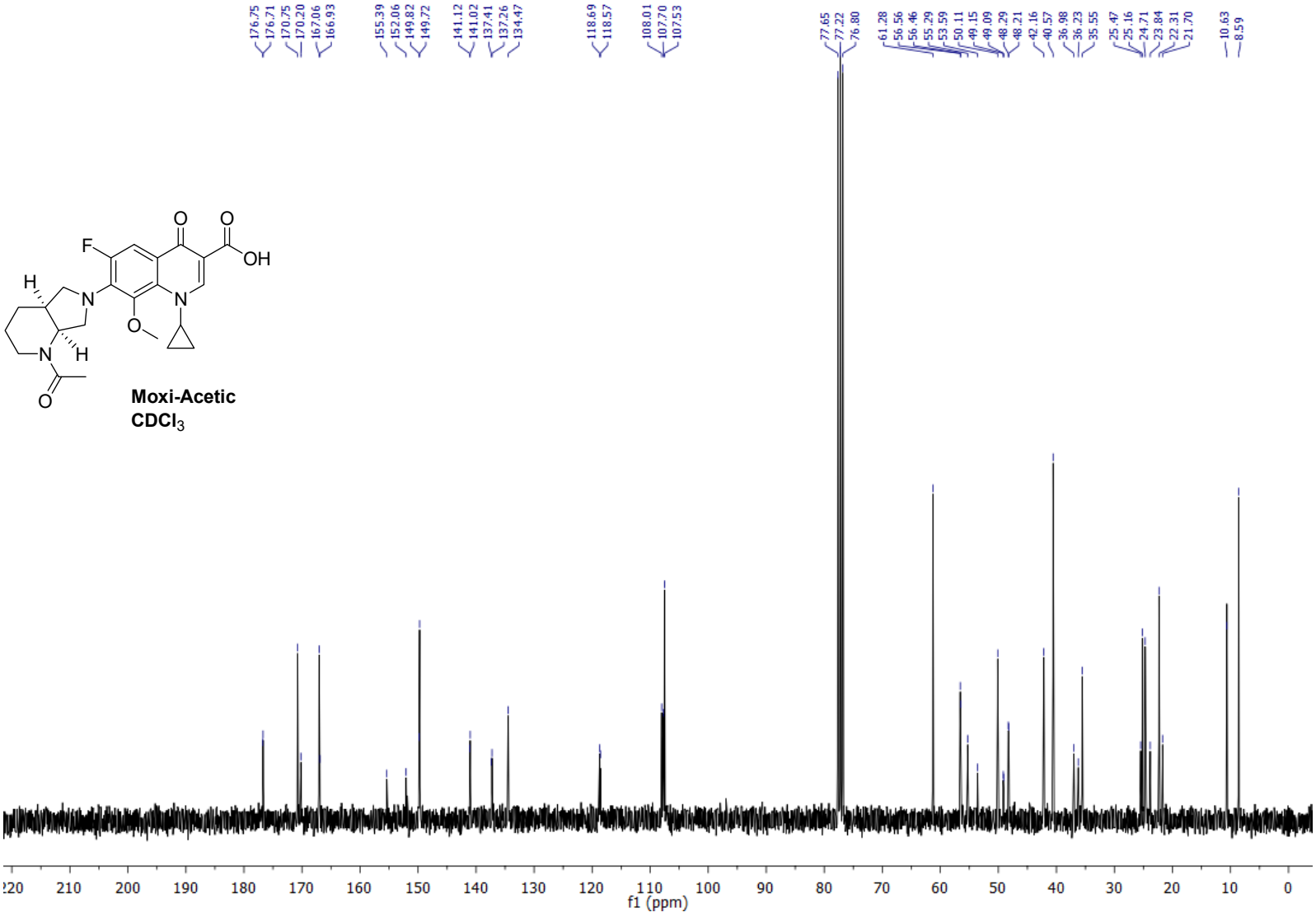
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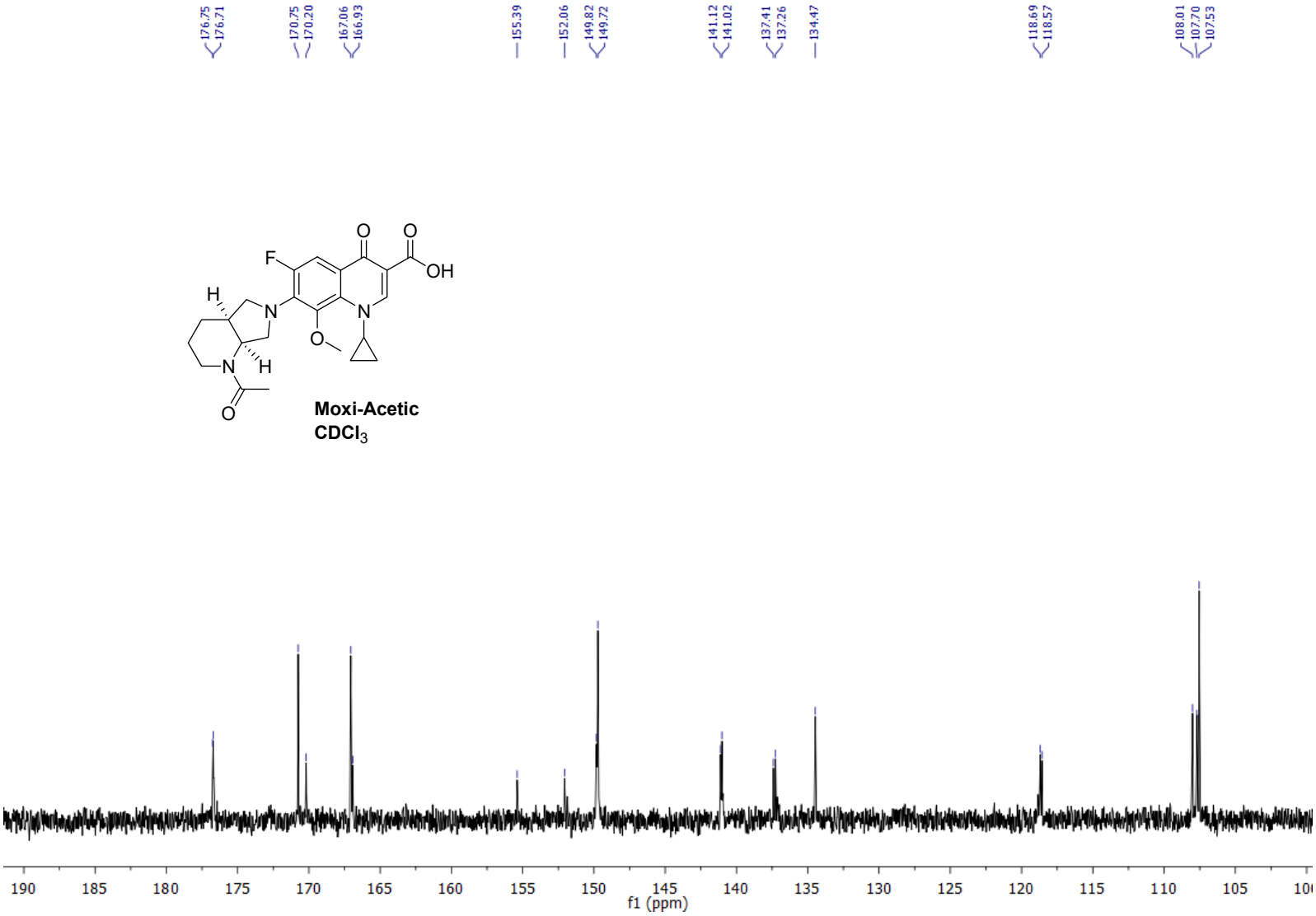
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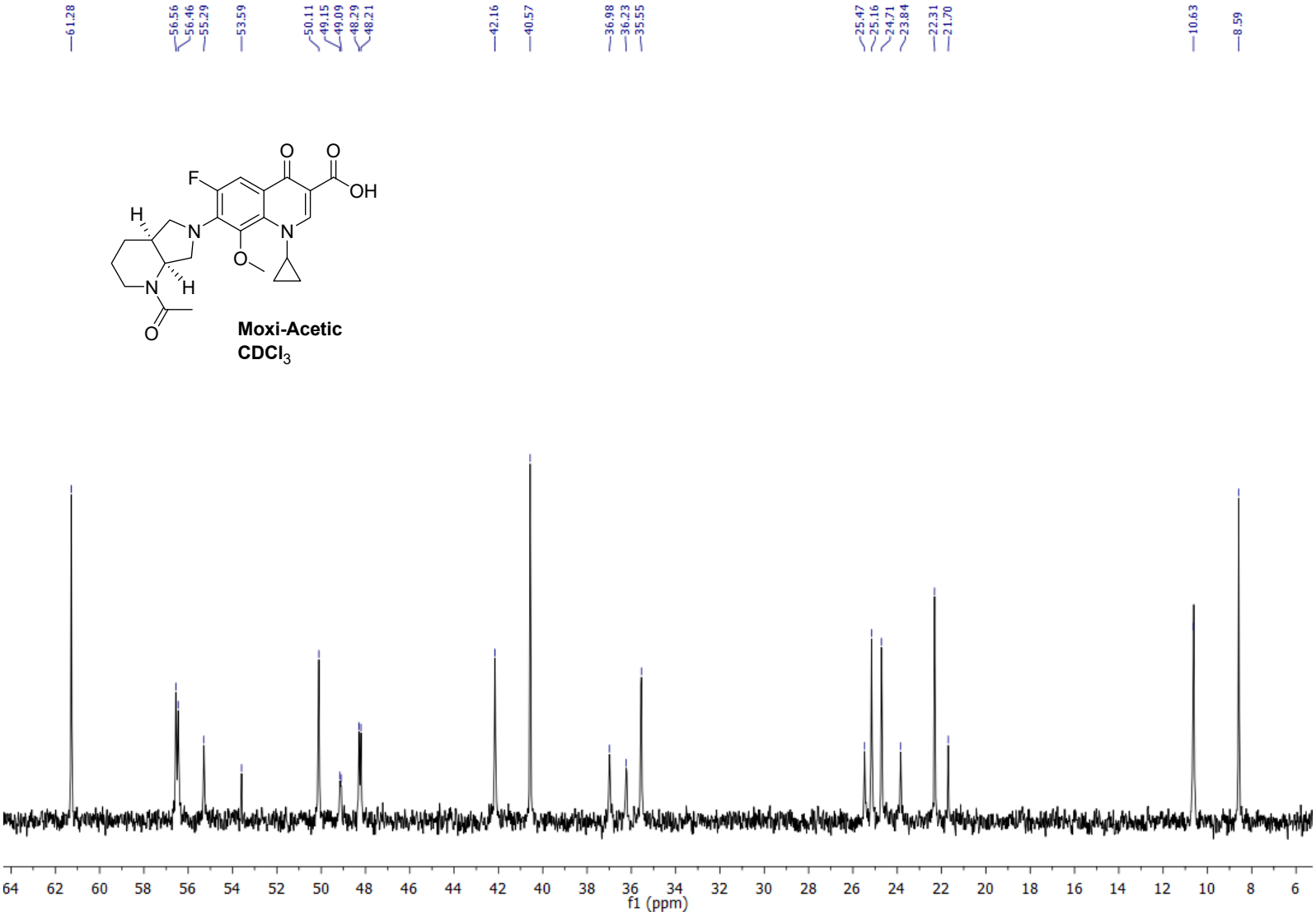
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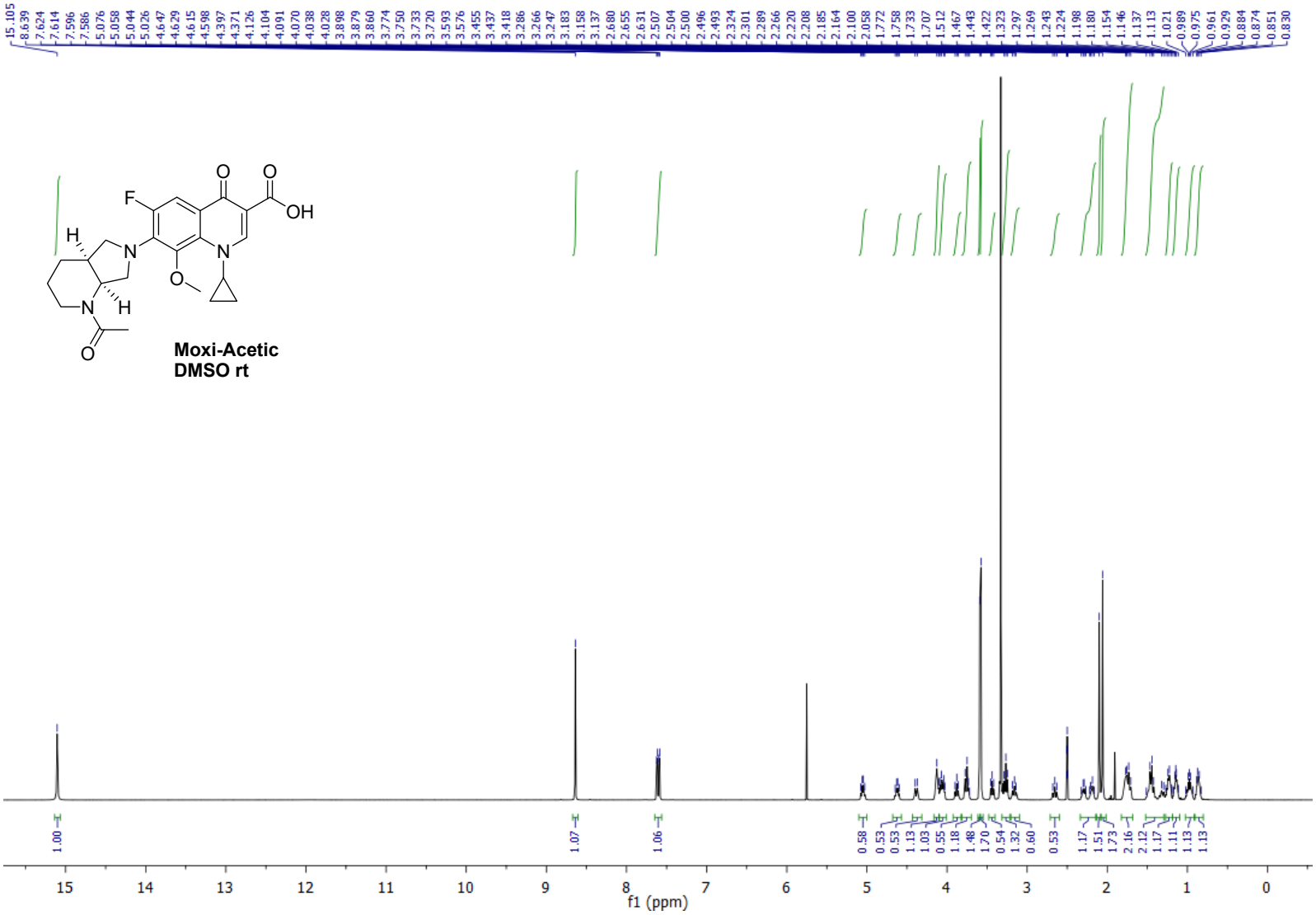
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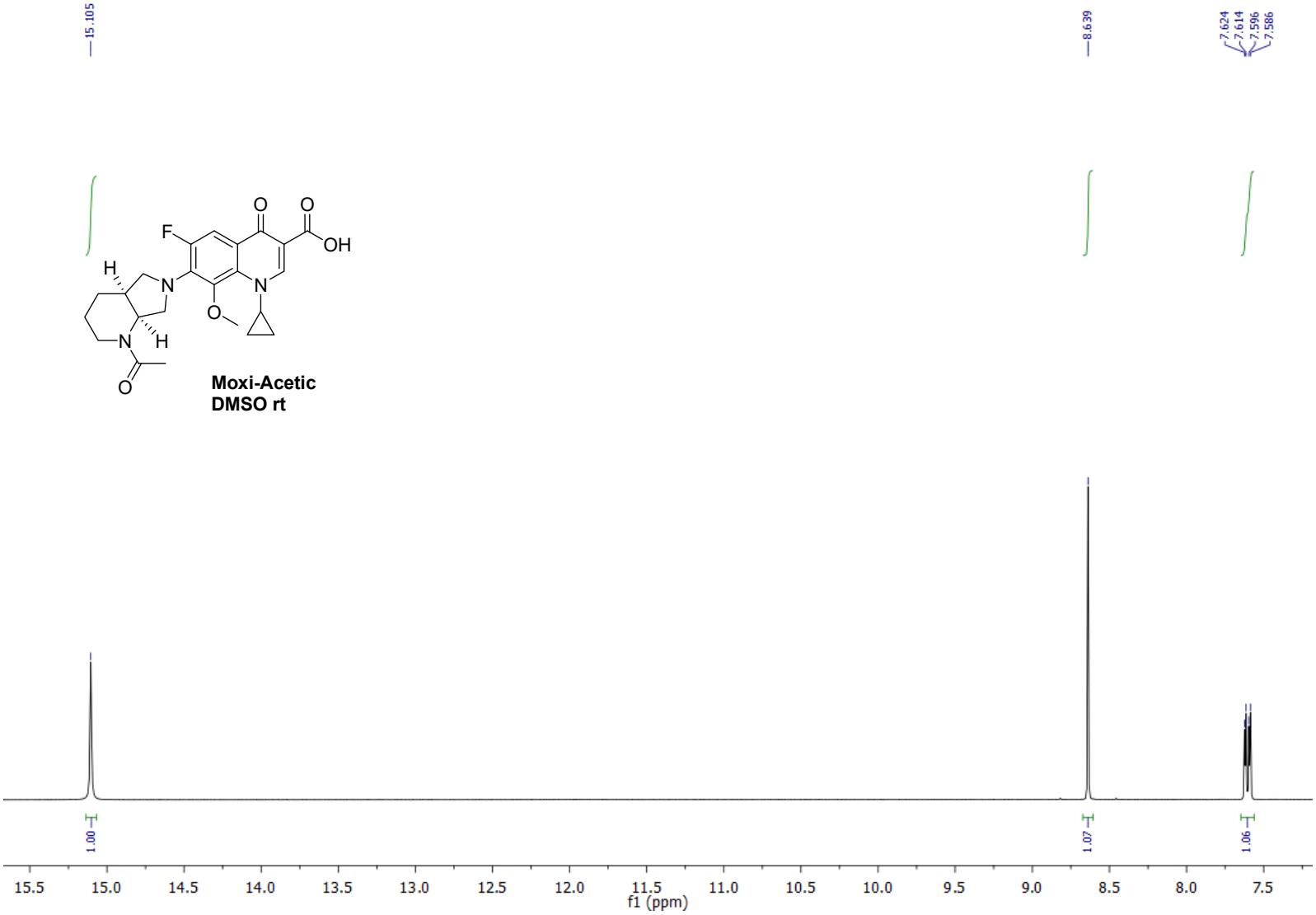

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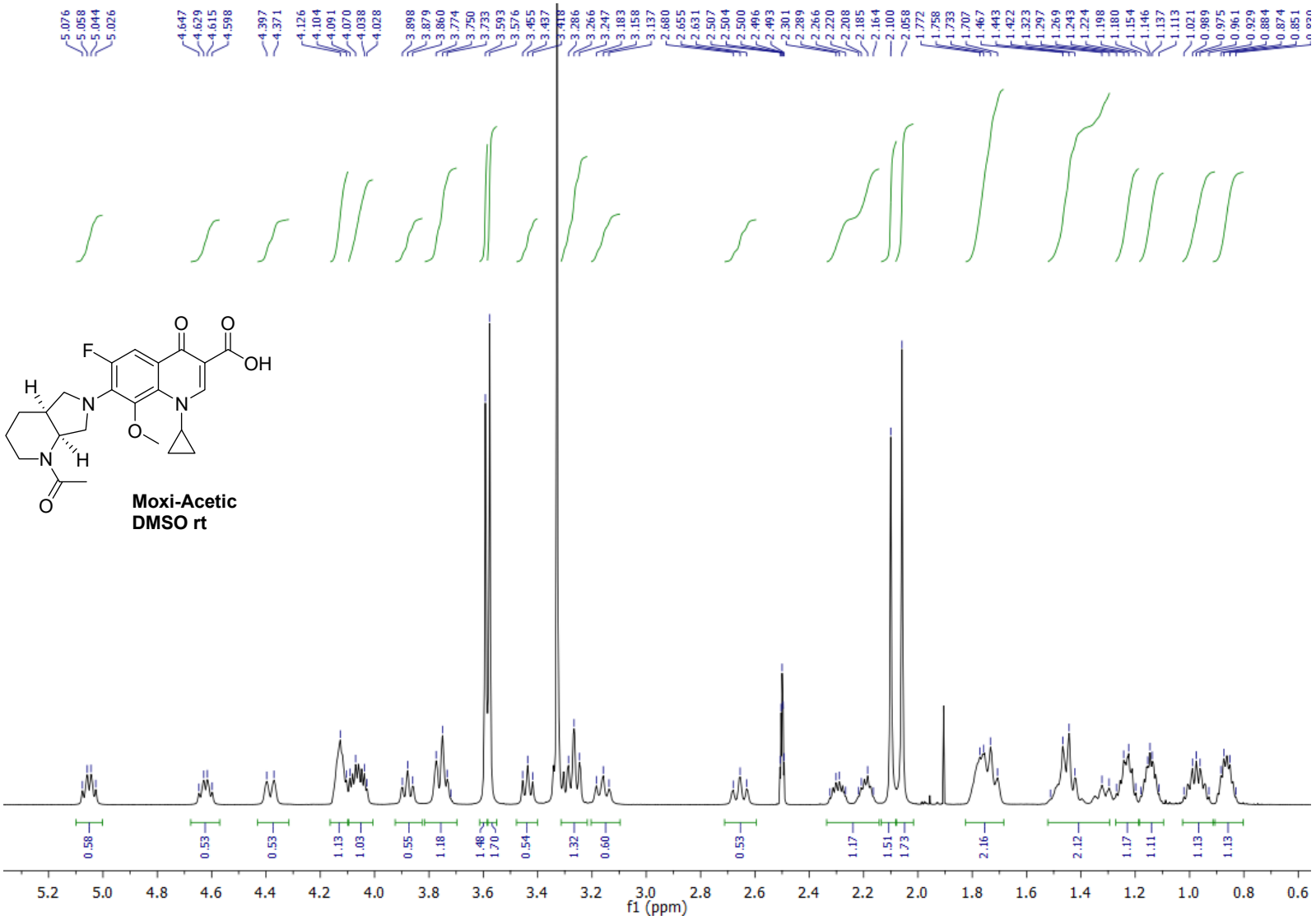
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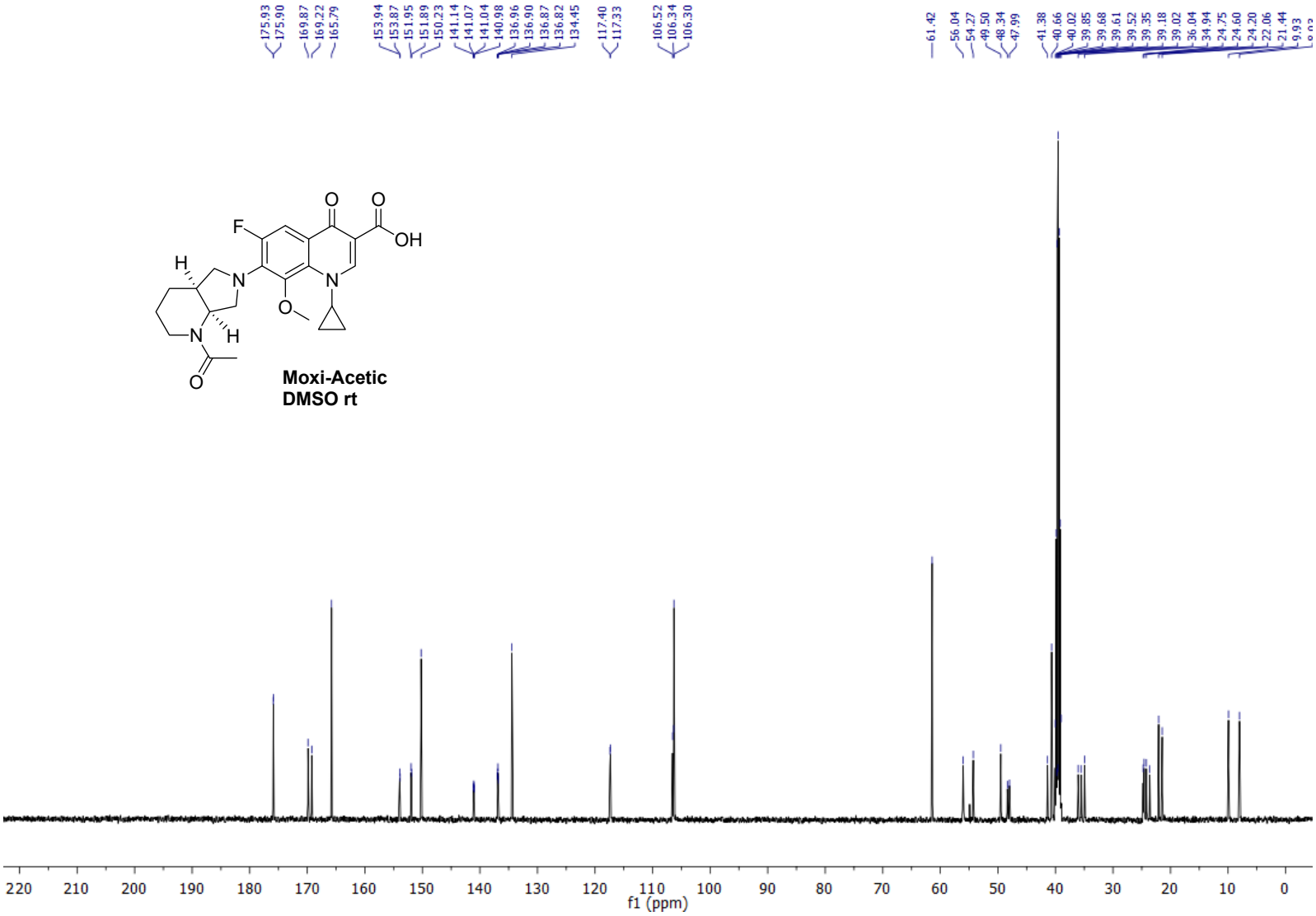
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Moxi-Acetic
DMSO rt
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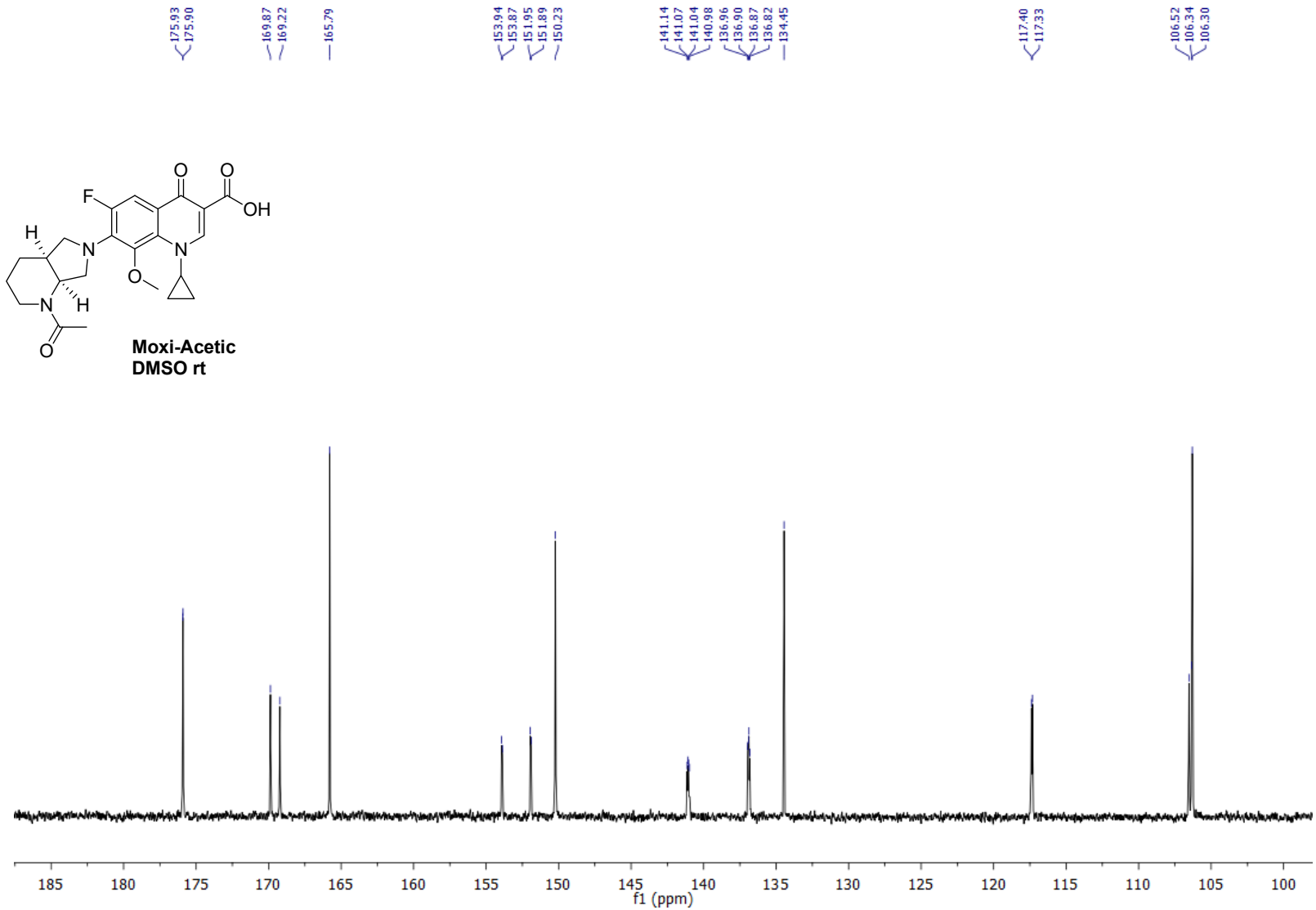
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DMSO rt
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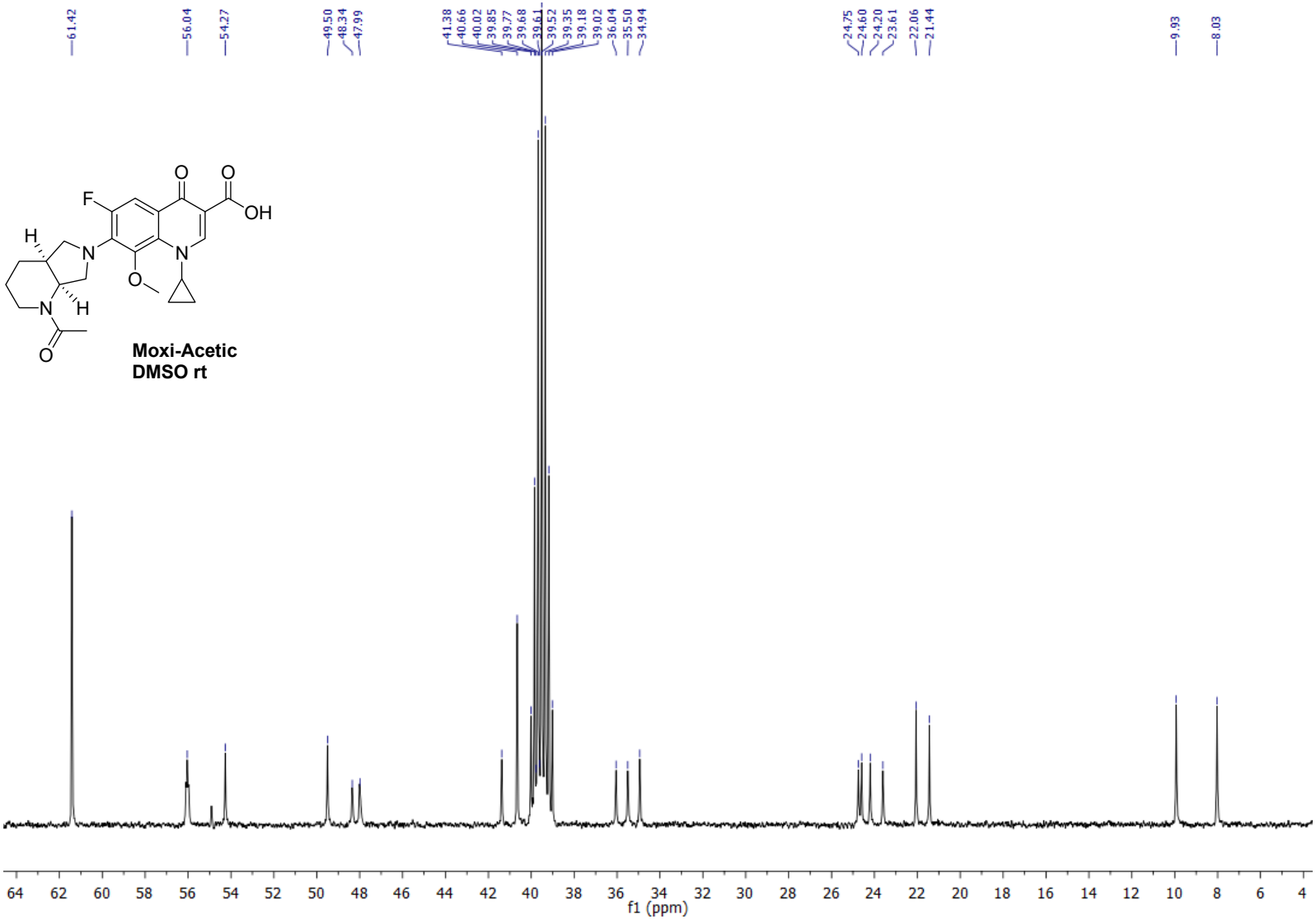
f1 (ppm)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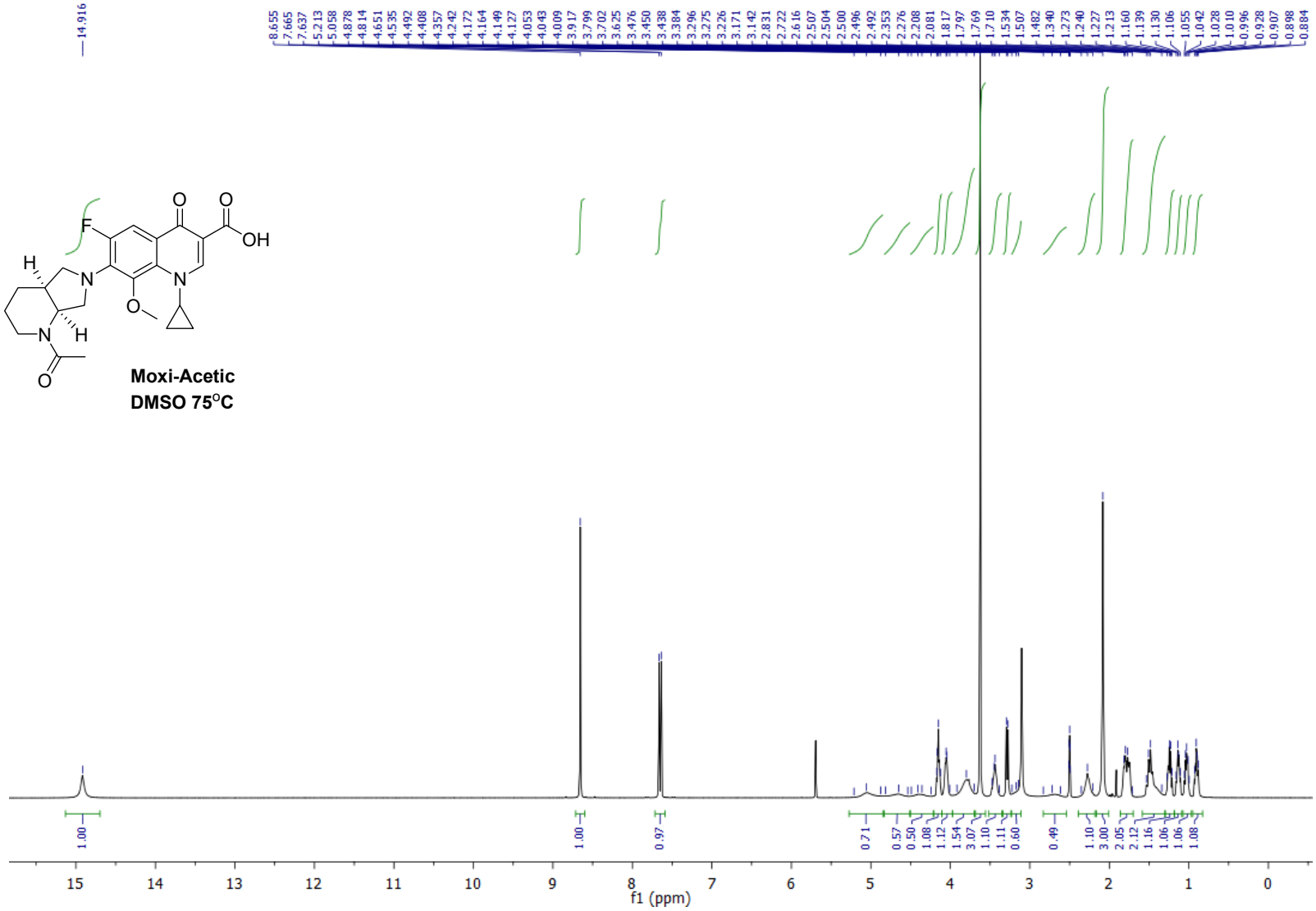
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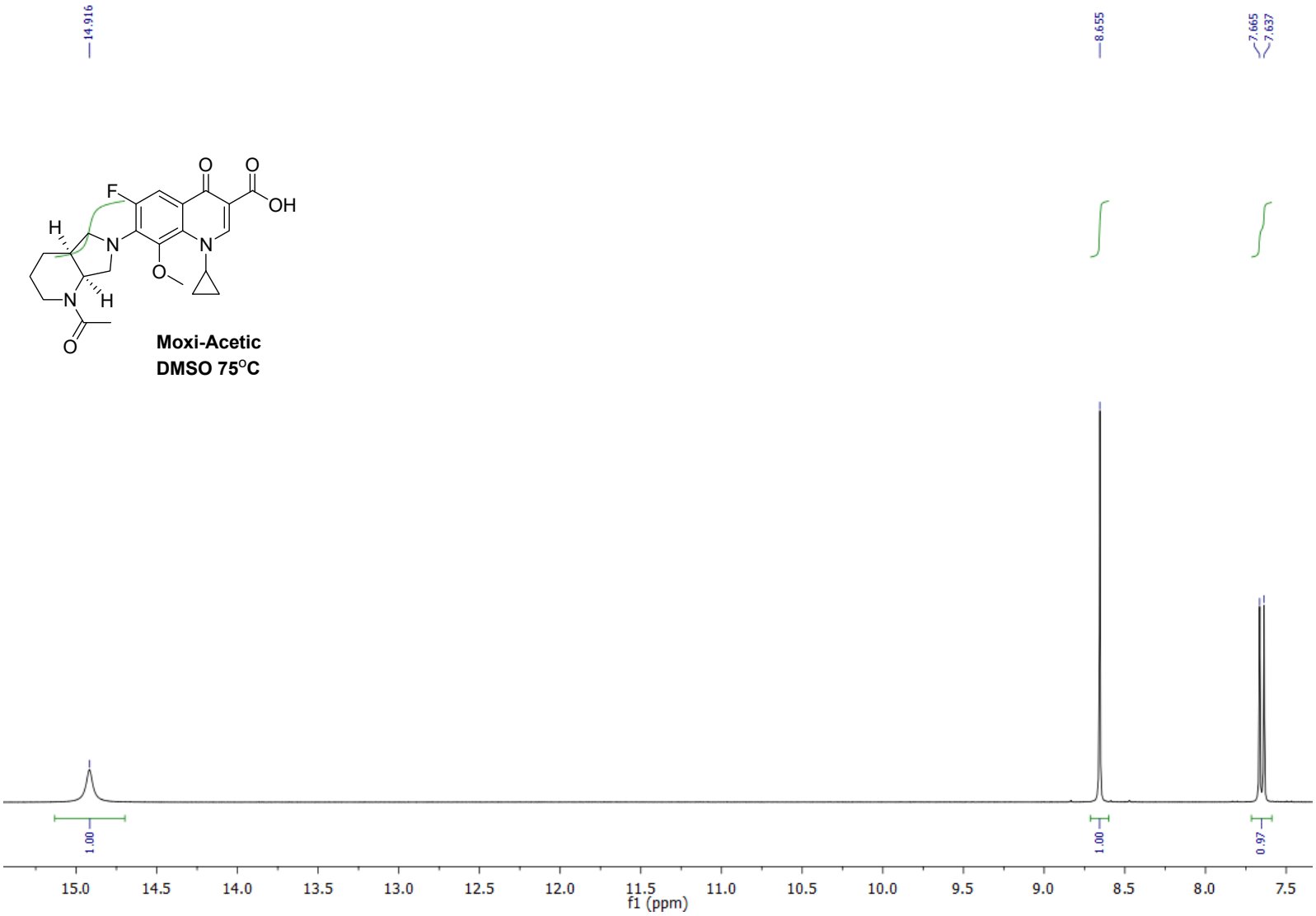
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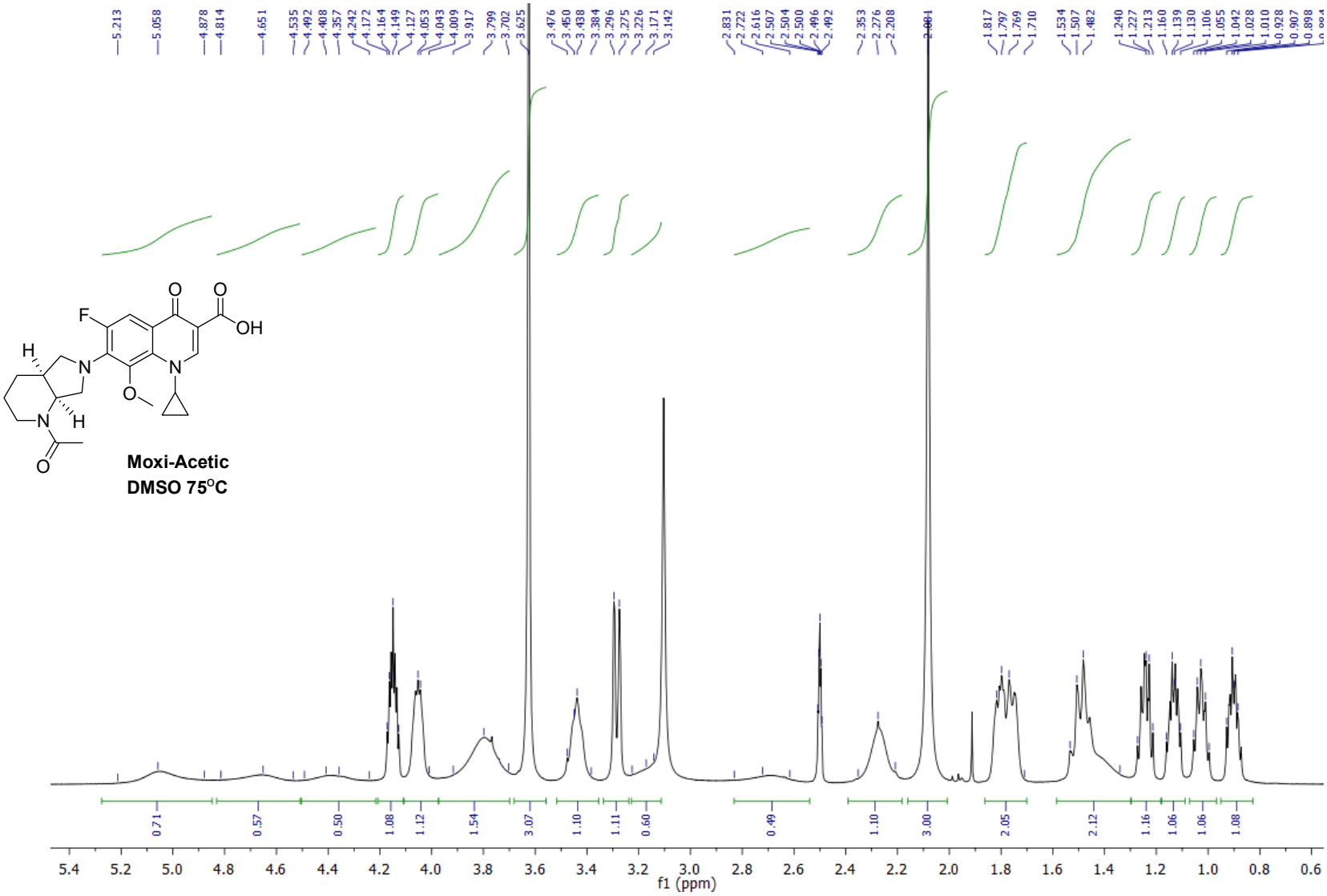
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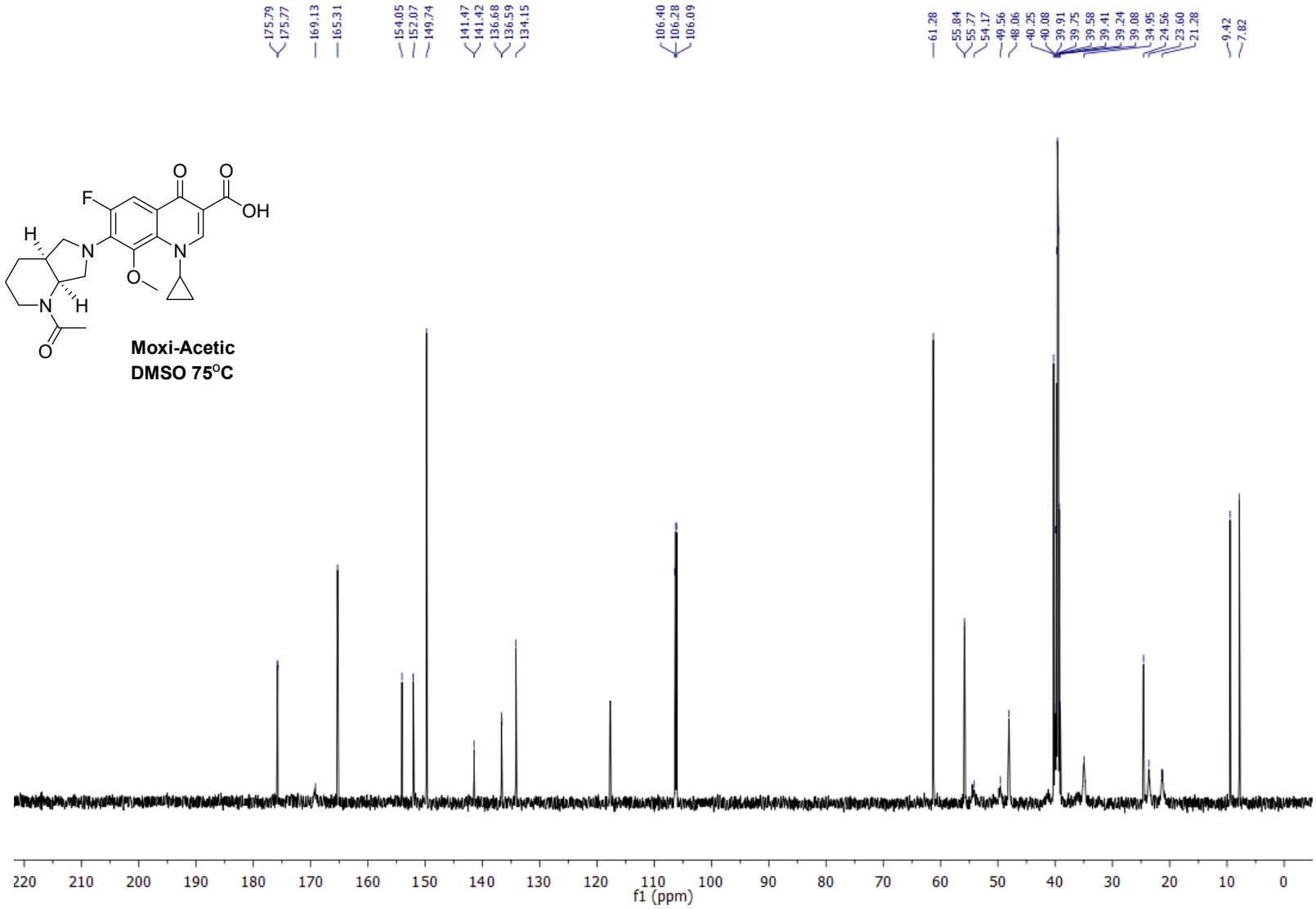
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DMSO 75°C
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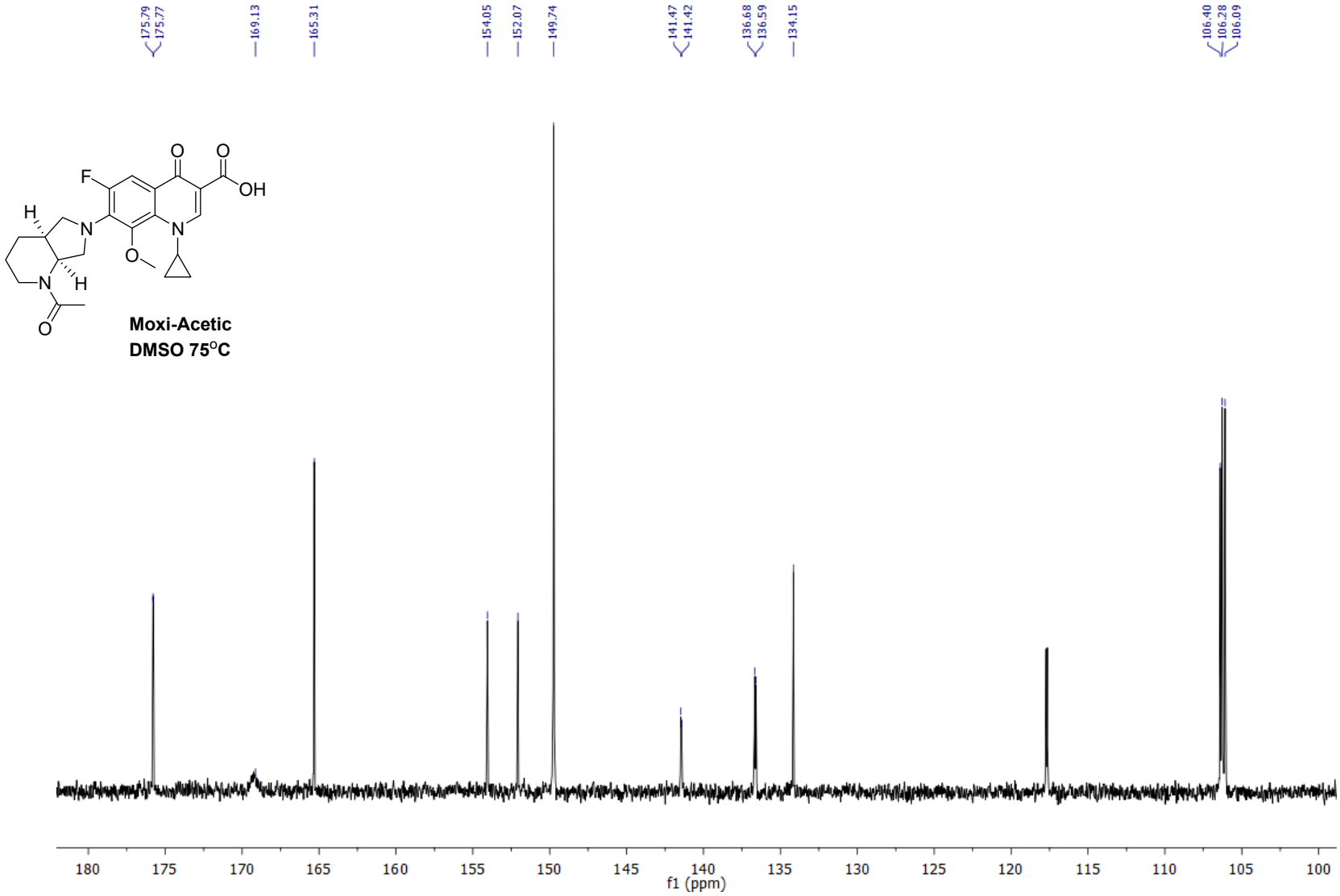
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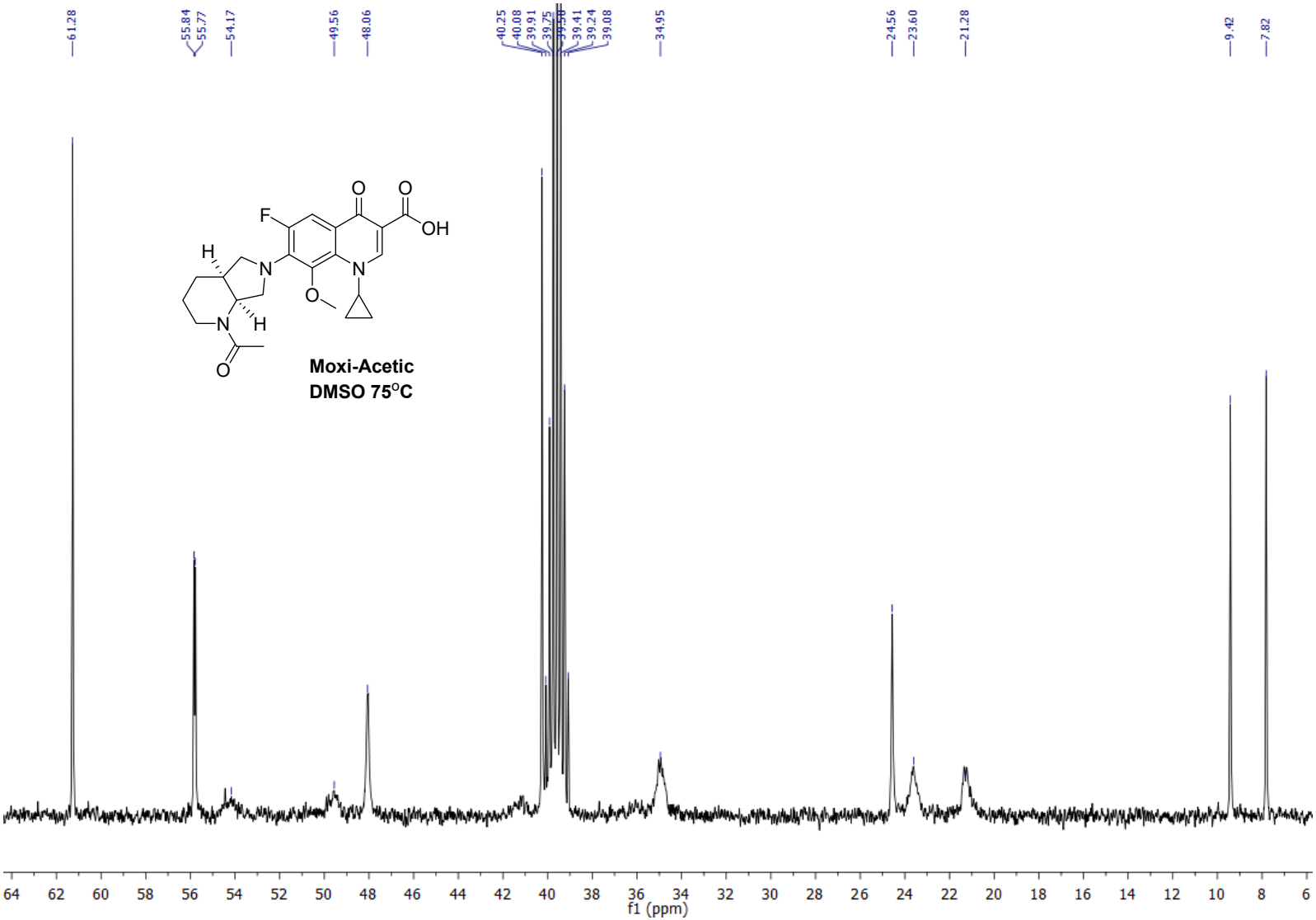
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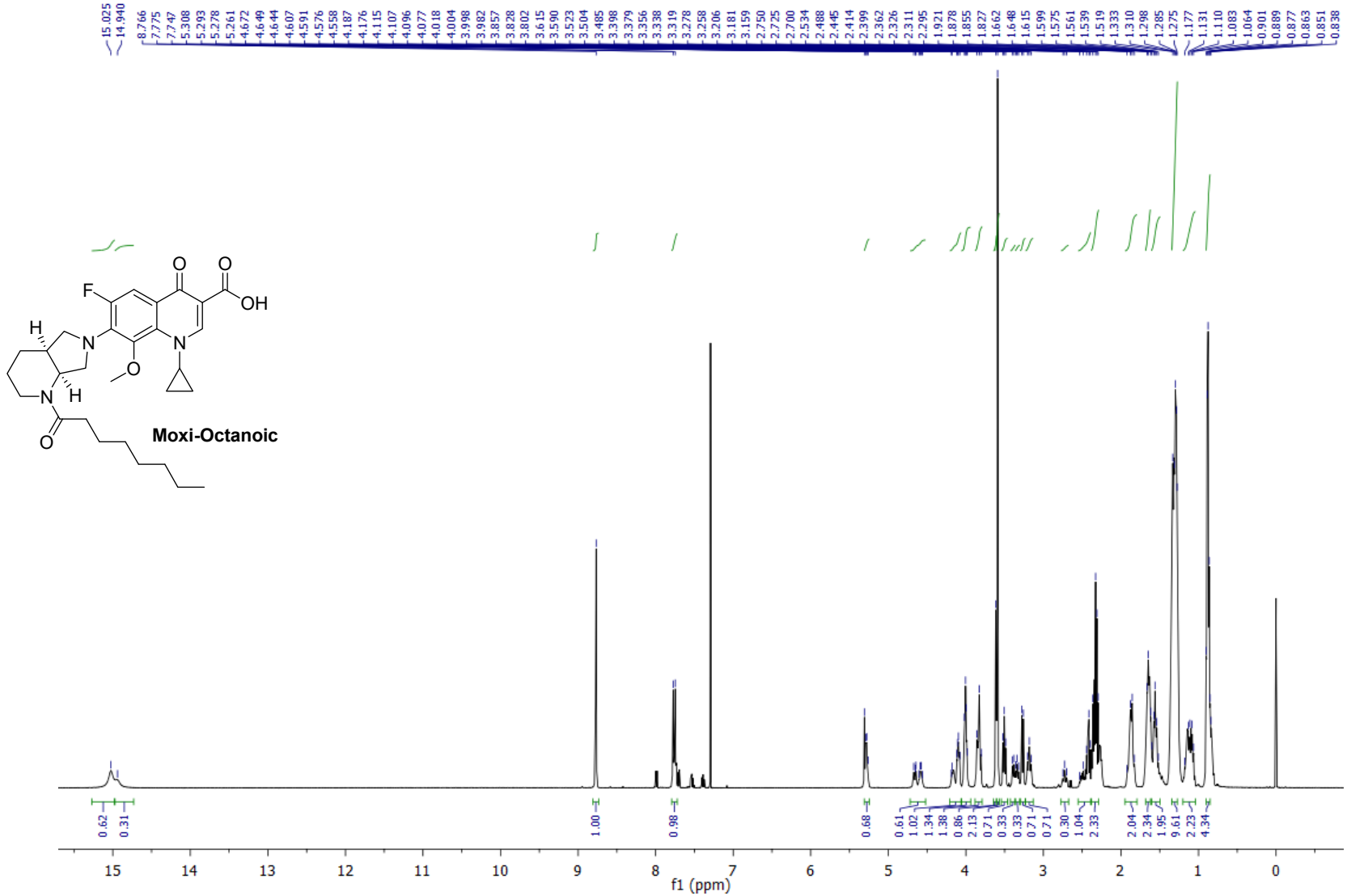
f1 (ppm)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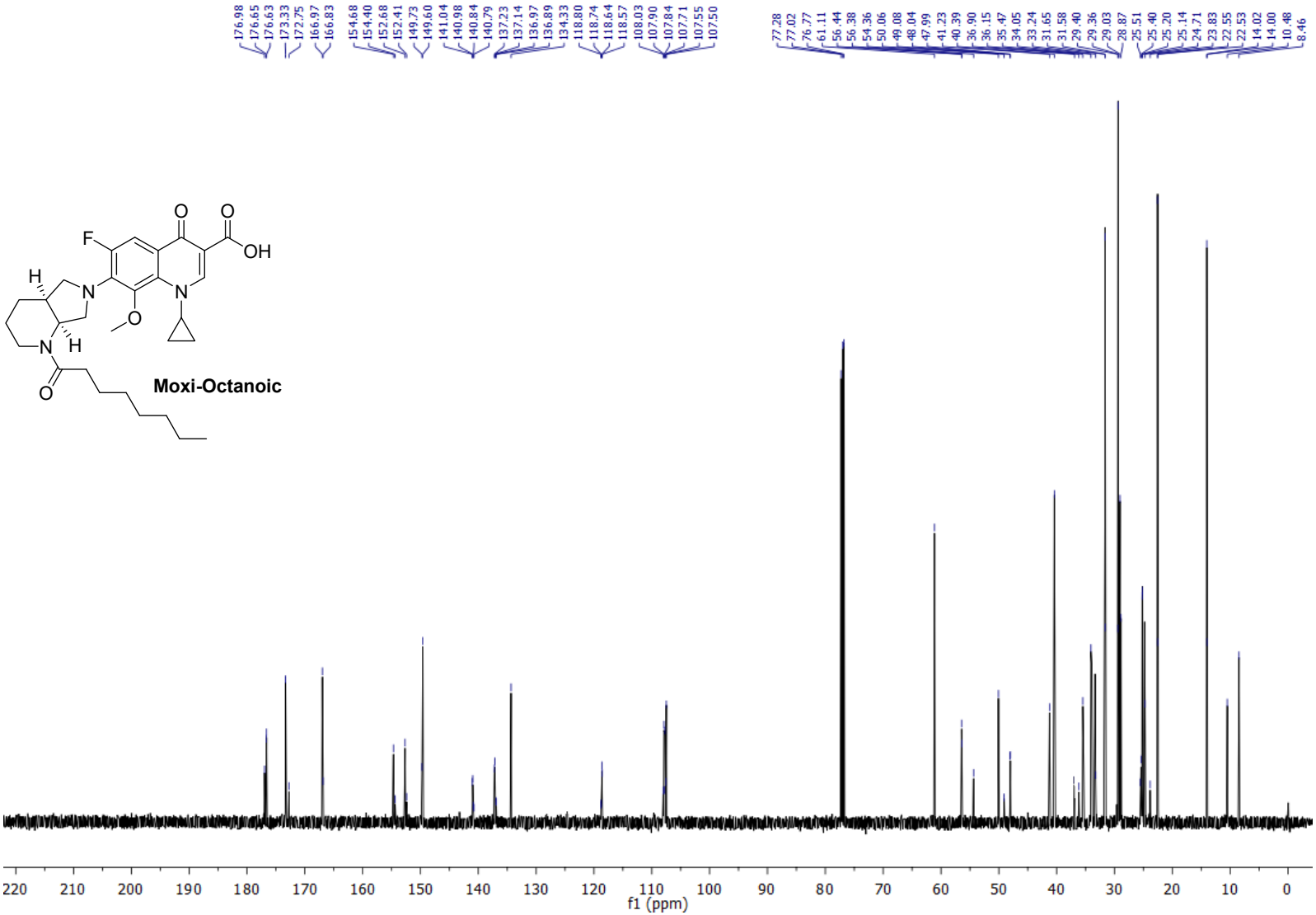
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Moxi-Octanoic
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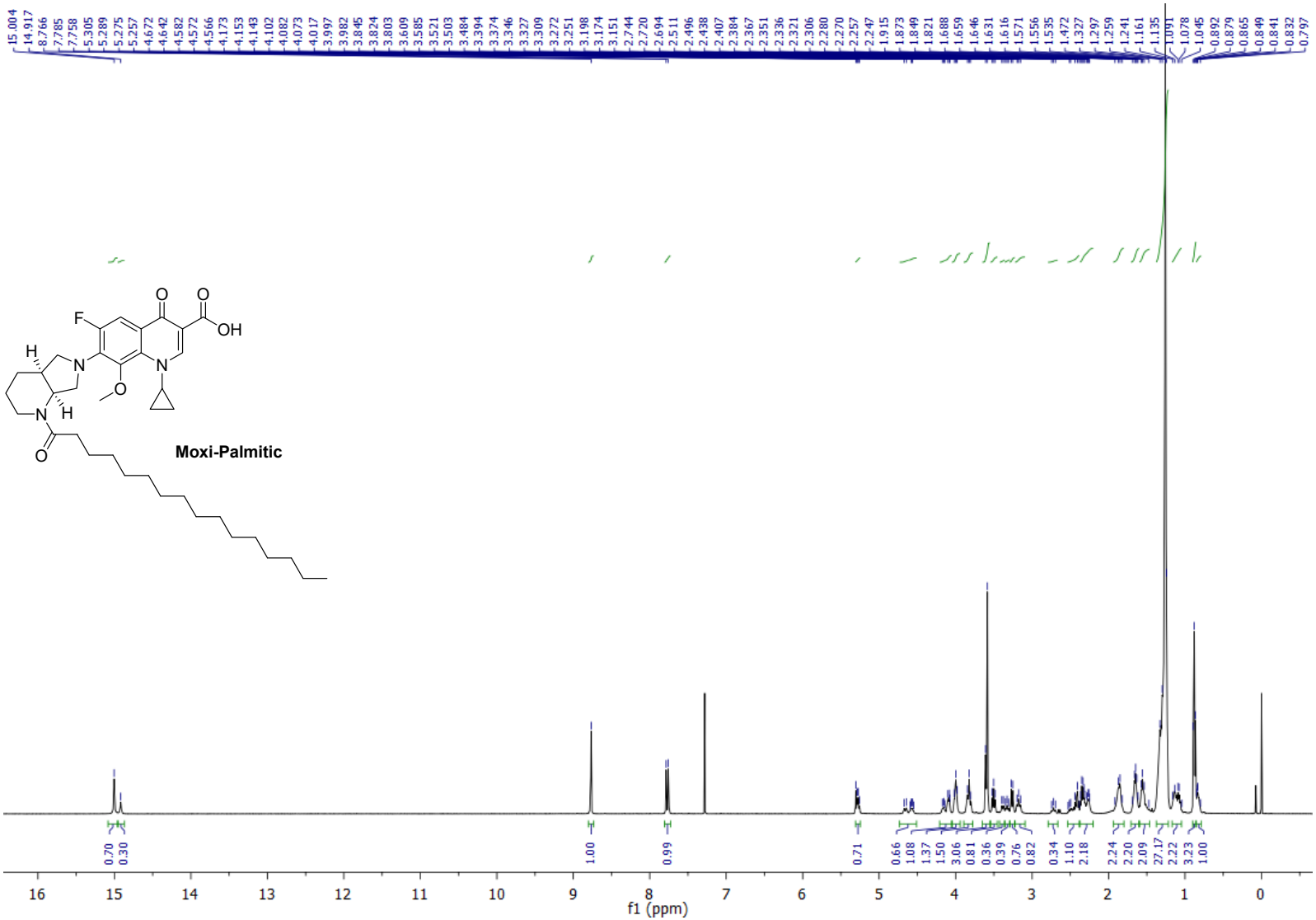
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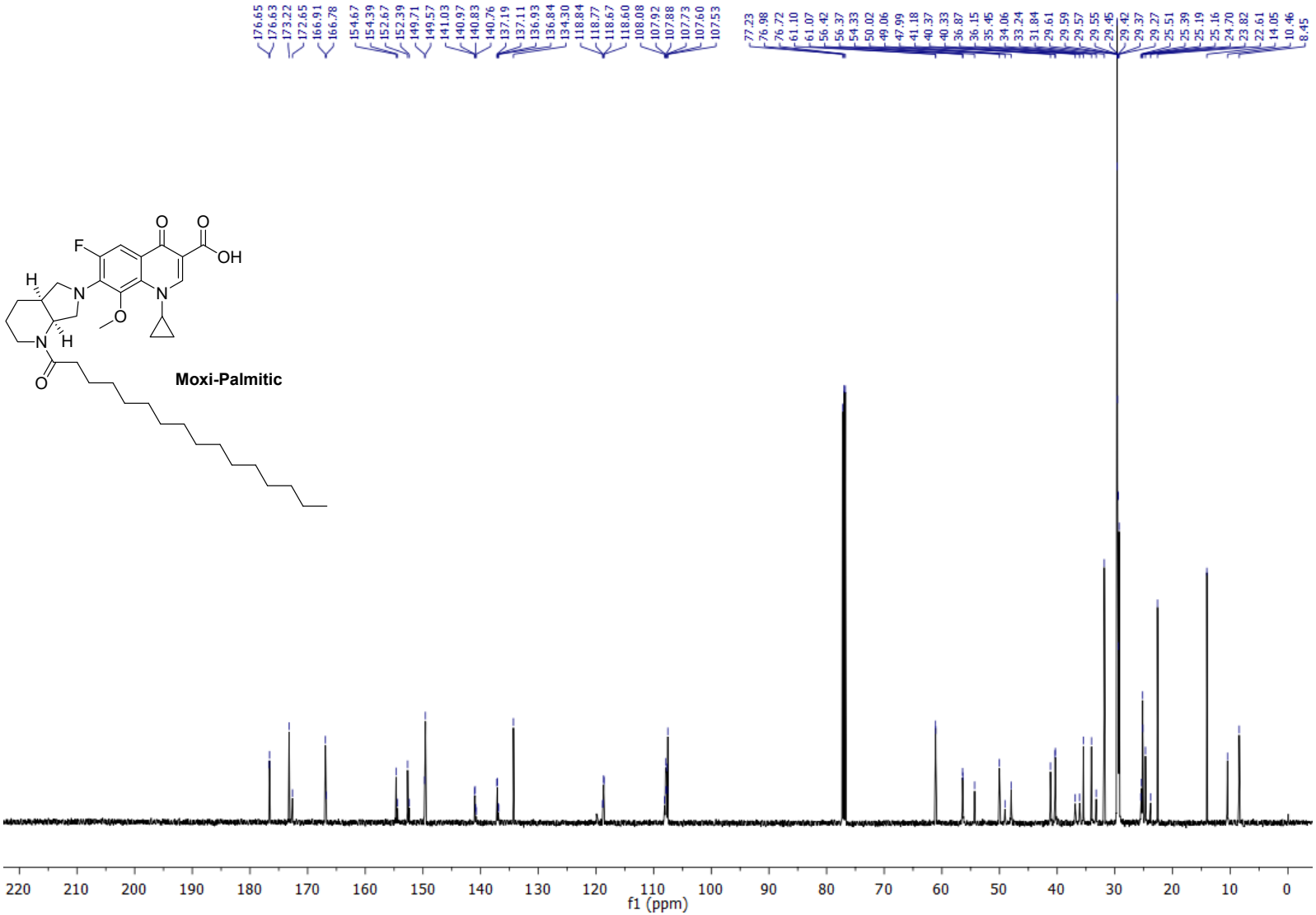
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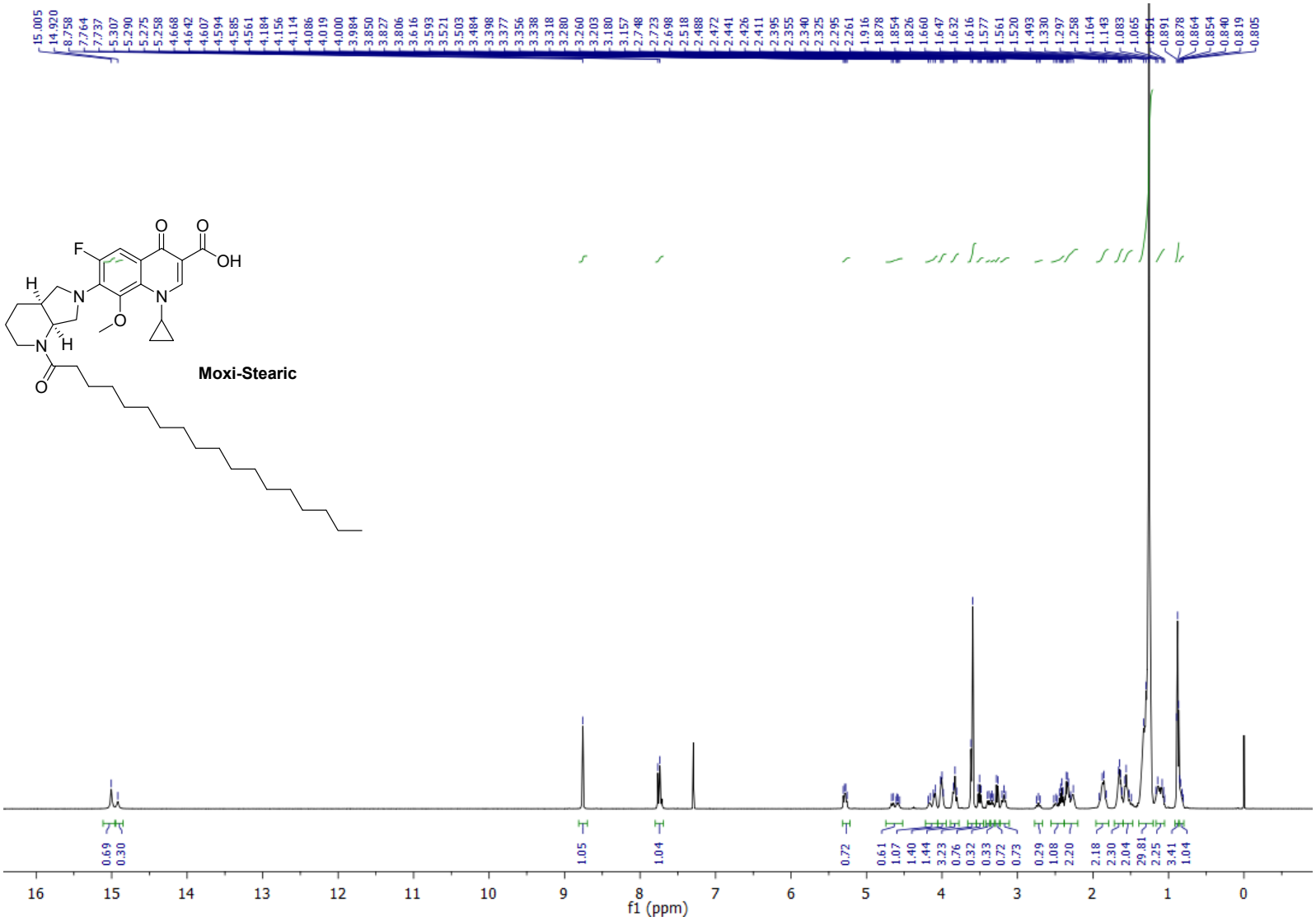
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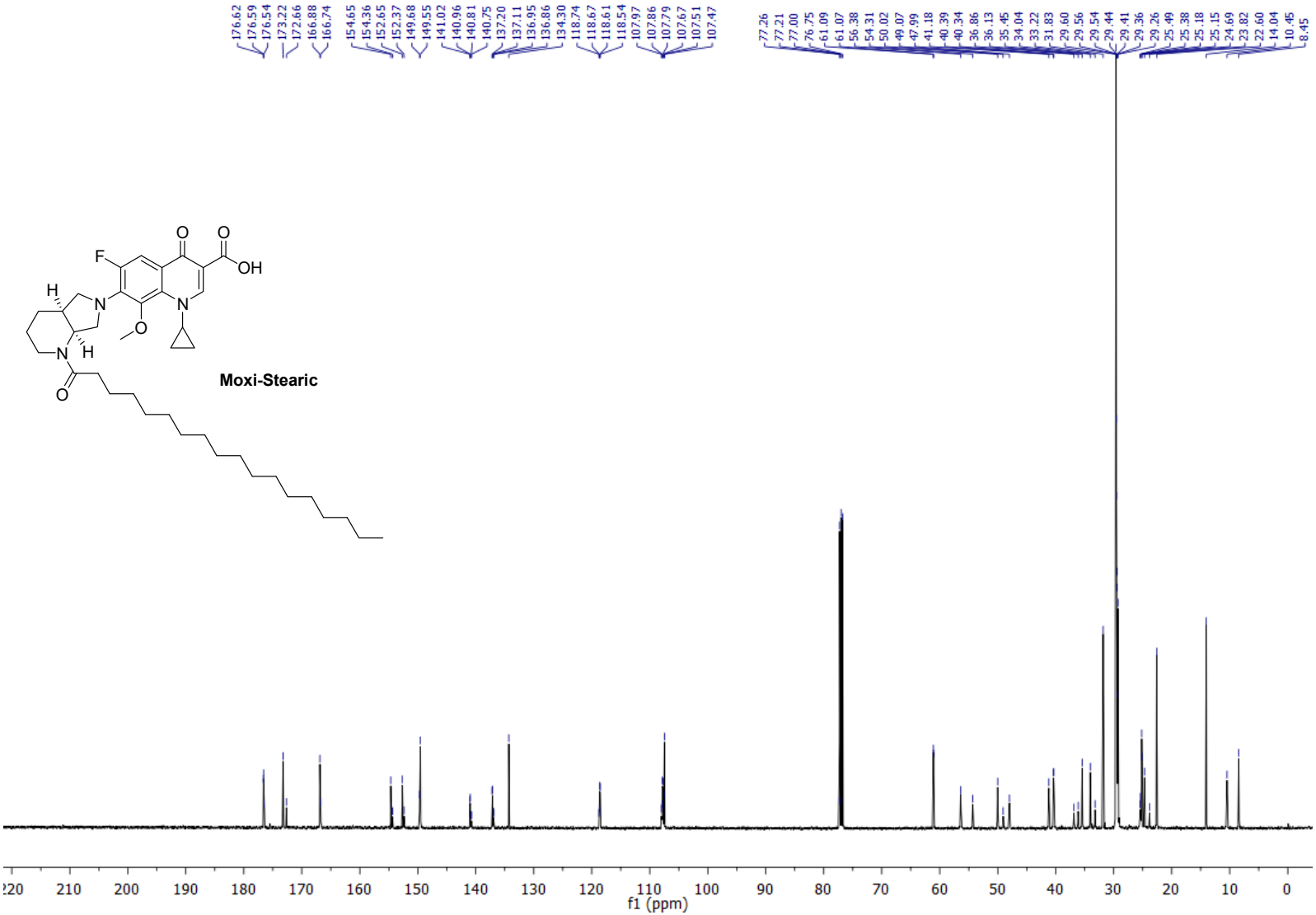
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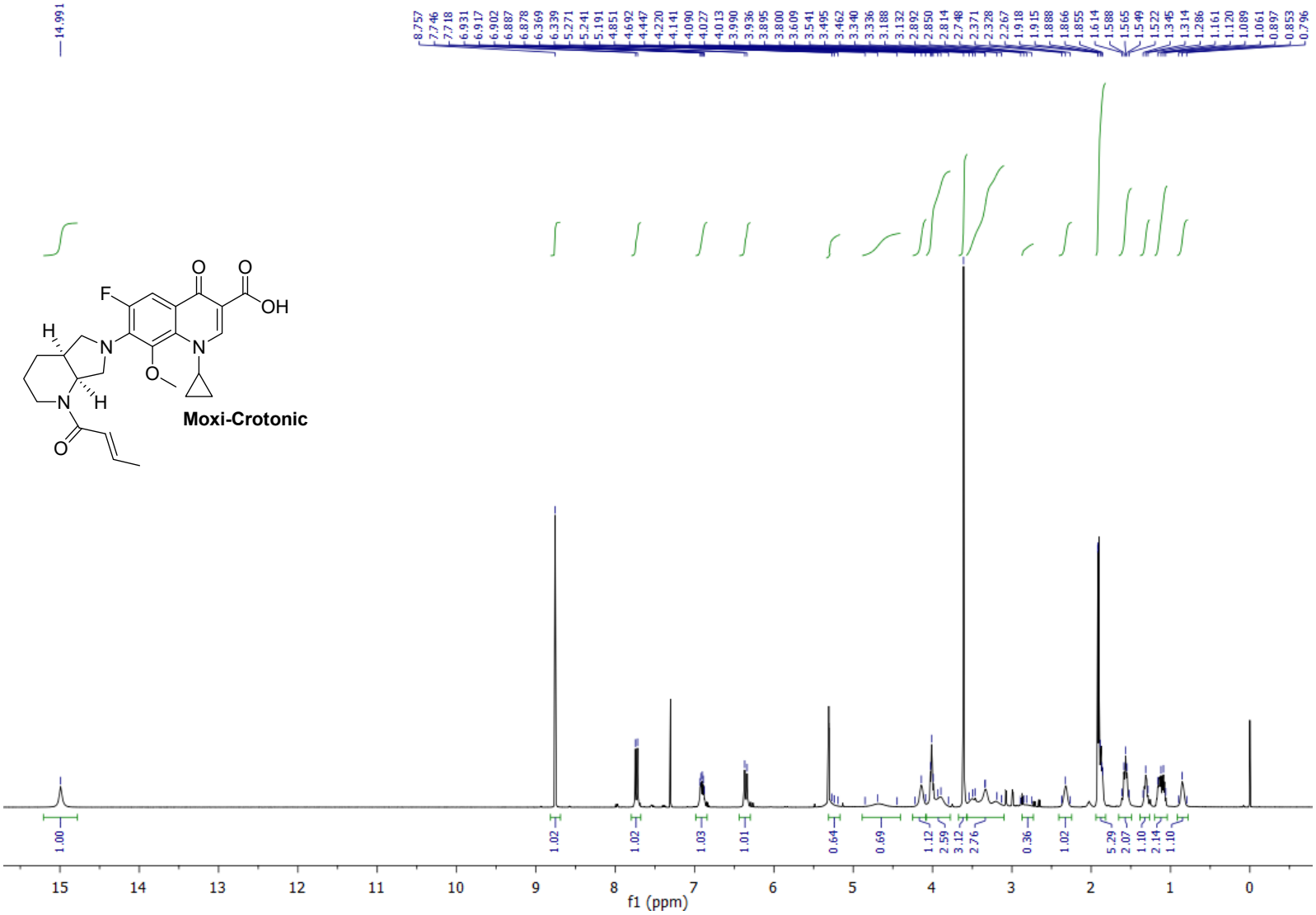
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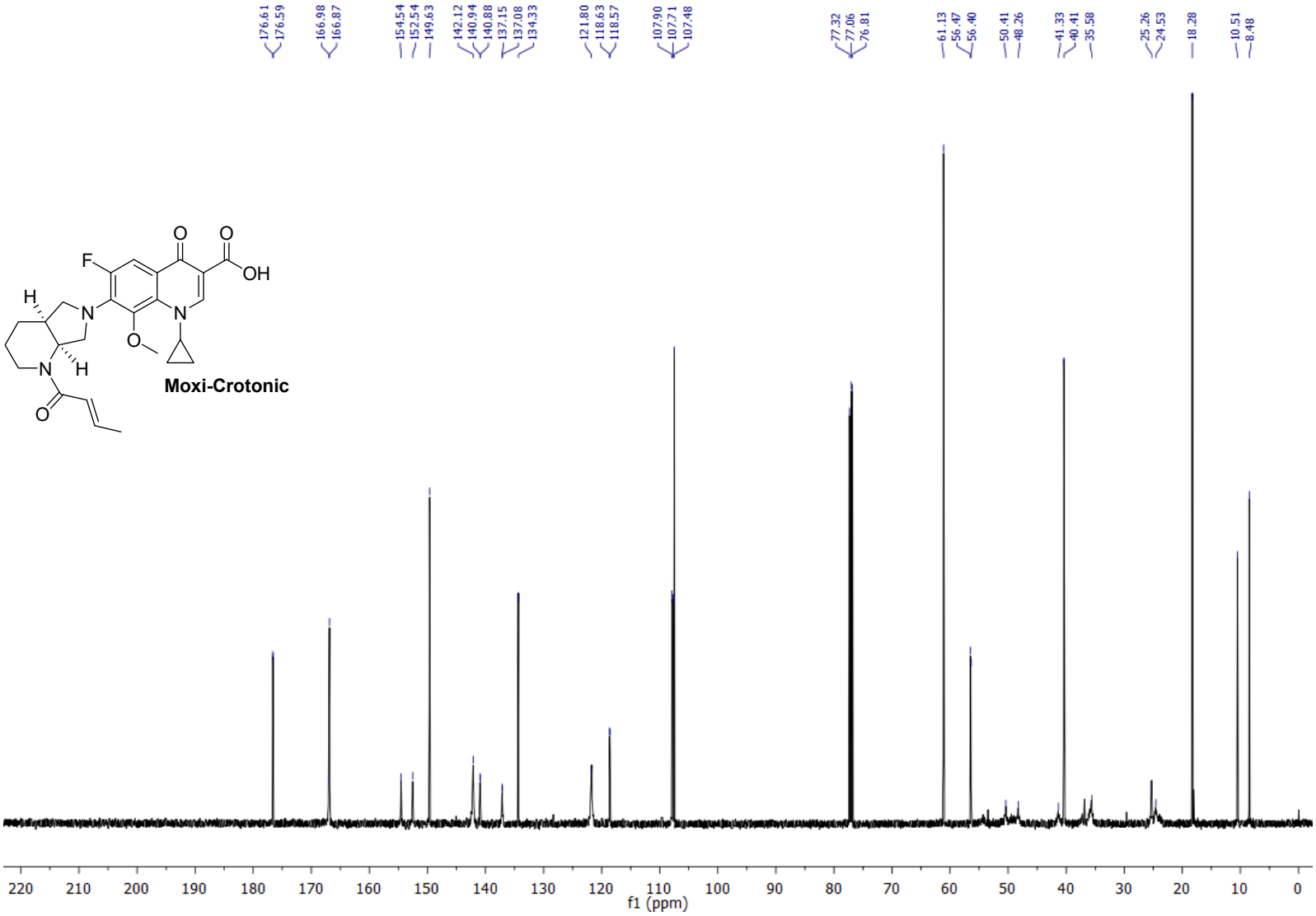
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18.28
10.51
8.48
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OH
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Moxi-Crotonic
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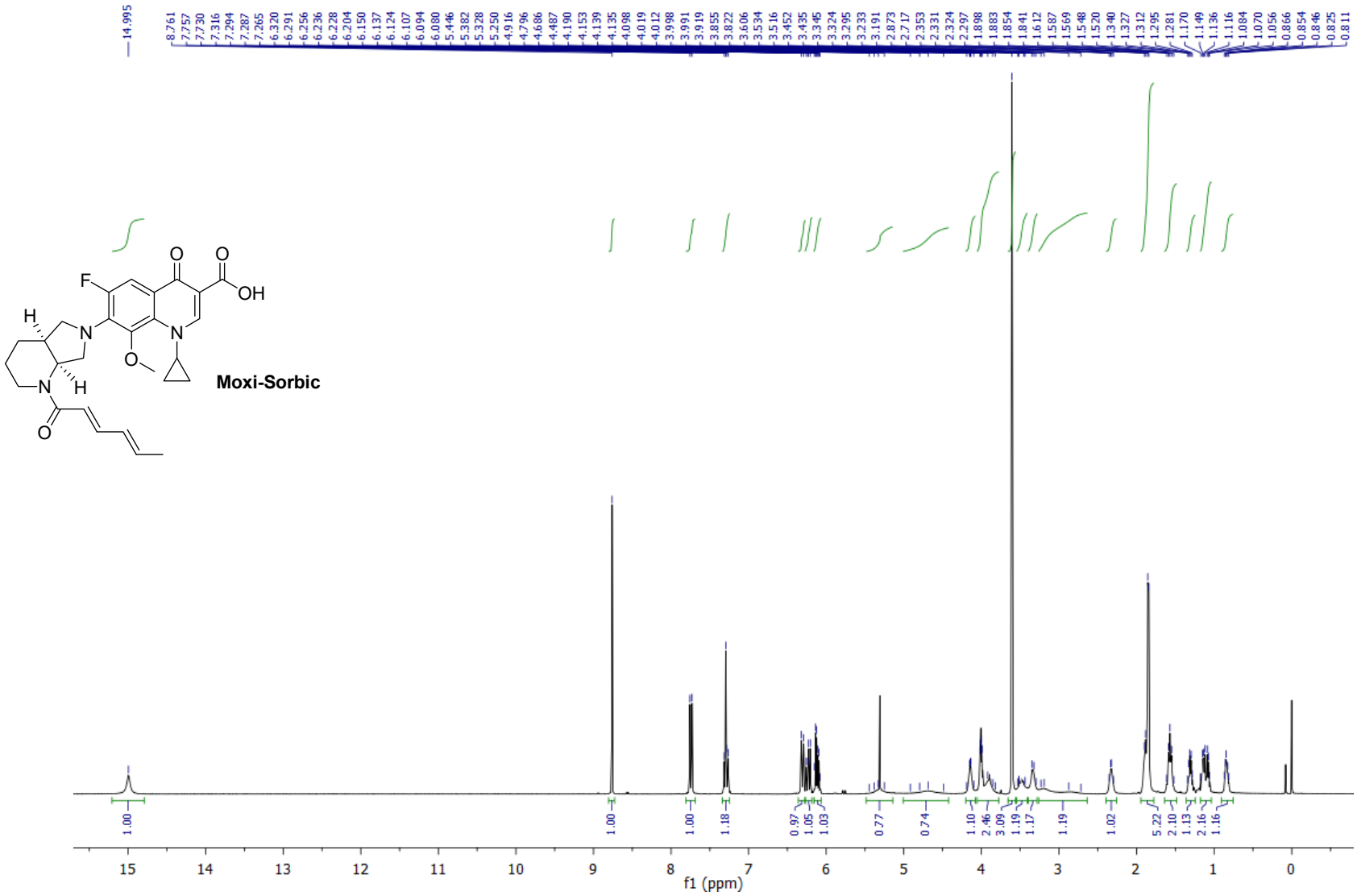
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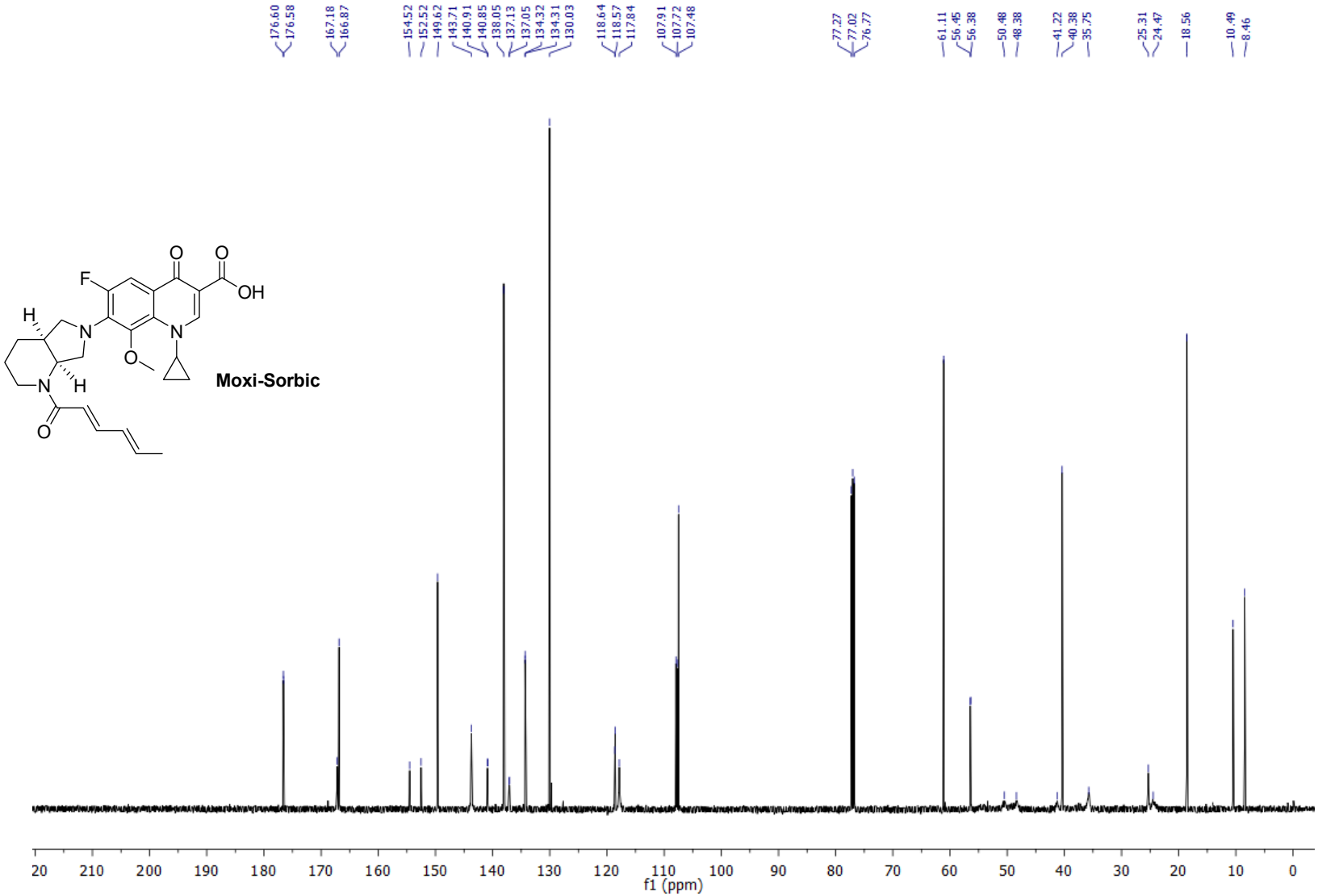
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118.57
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107.91
107.72
107.48
77.27
77.02
76.77
61.11
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50.48
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41.22
40.38
35.75
25.31
24.47
18.56
10.49
8.46
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Moxi-Sorbic
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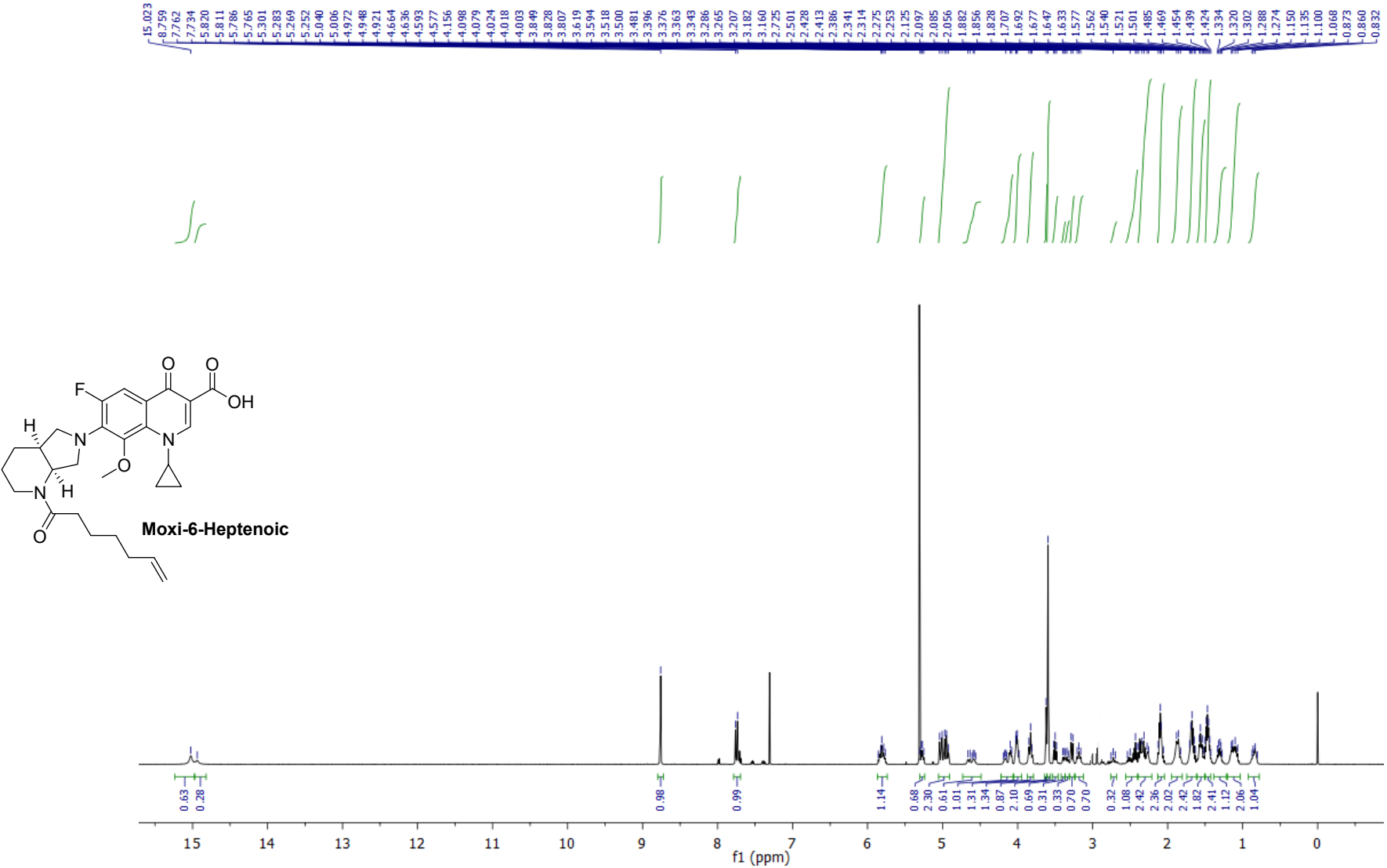

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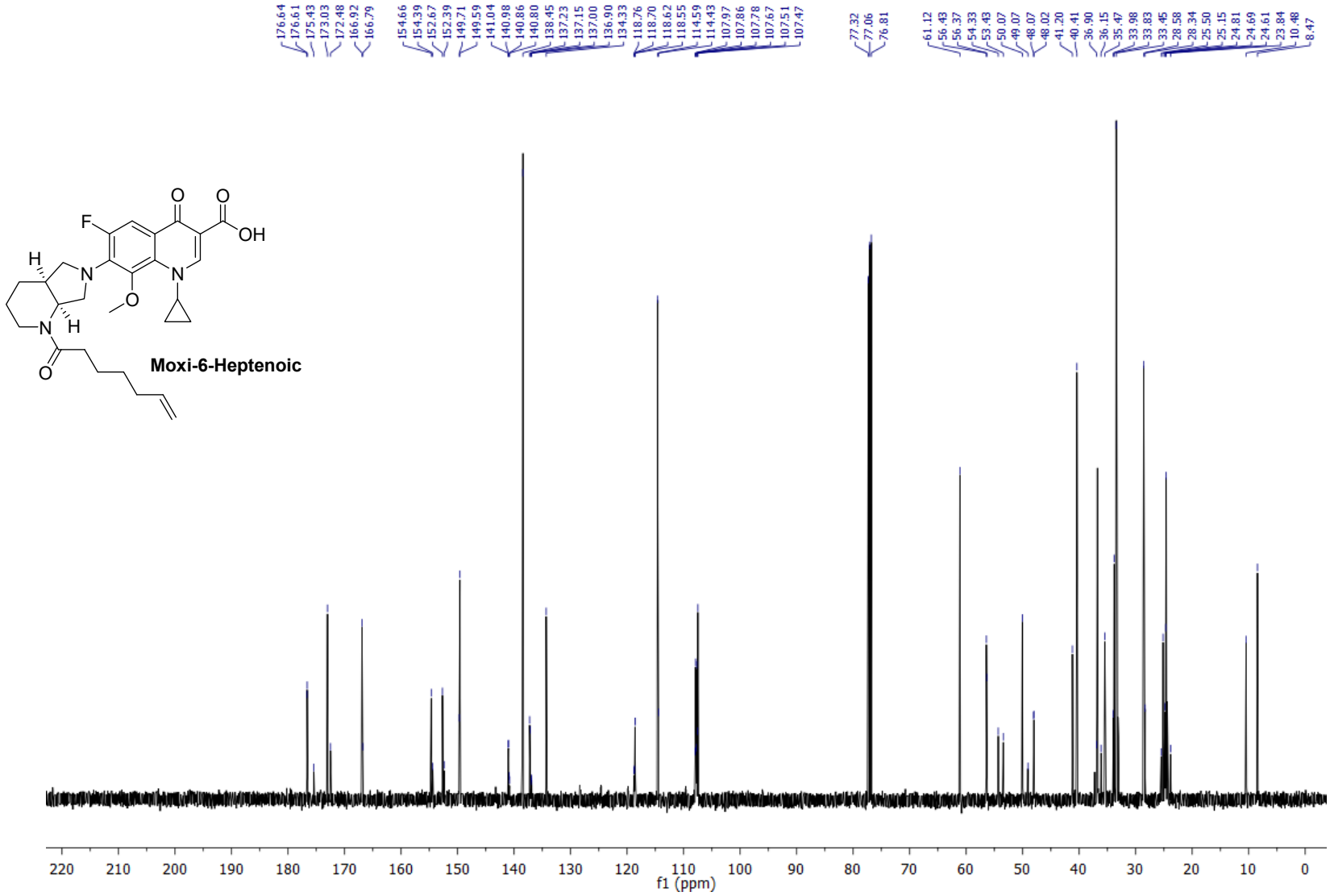
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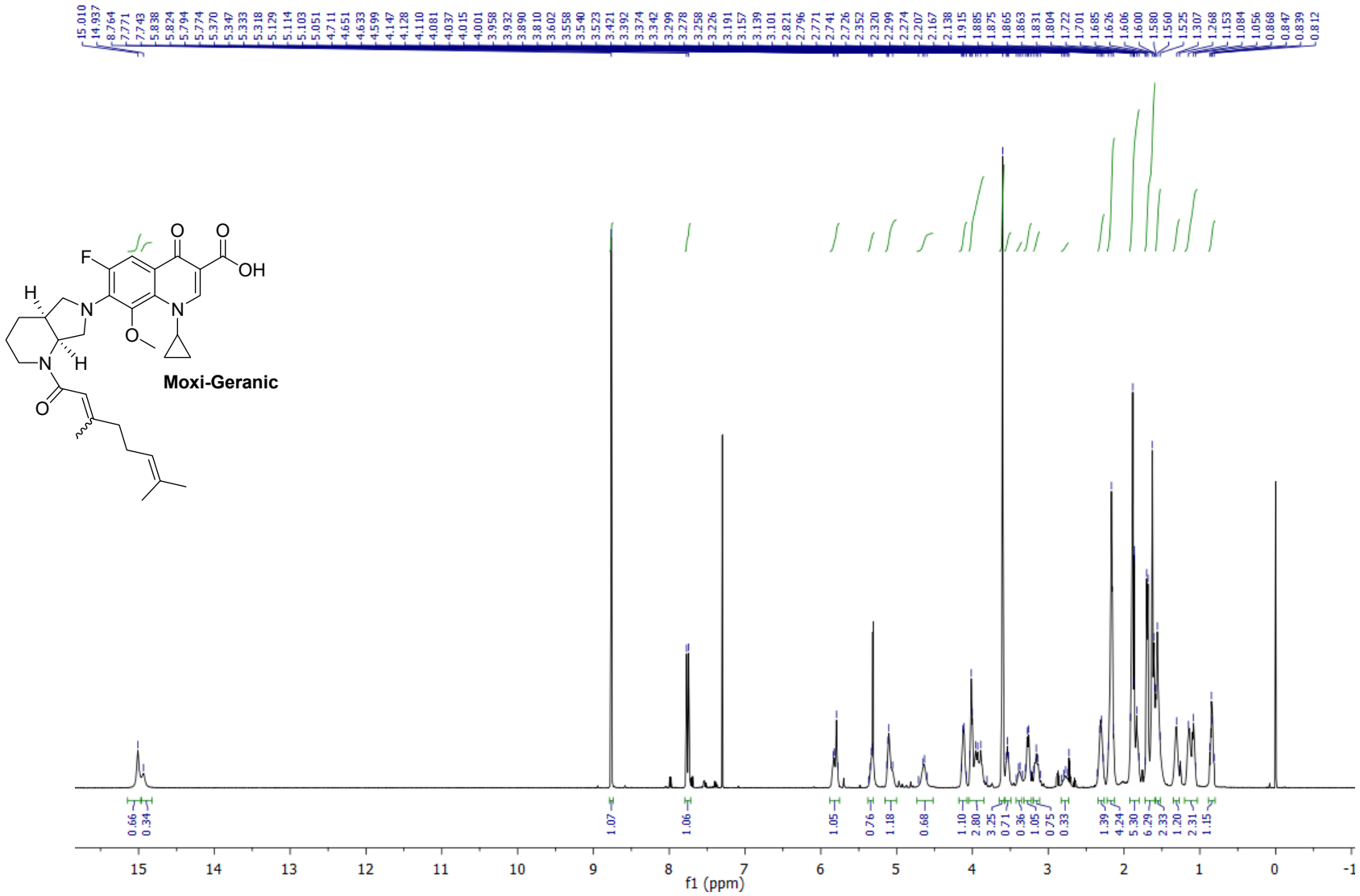
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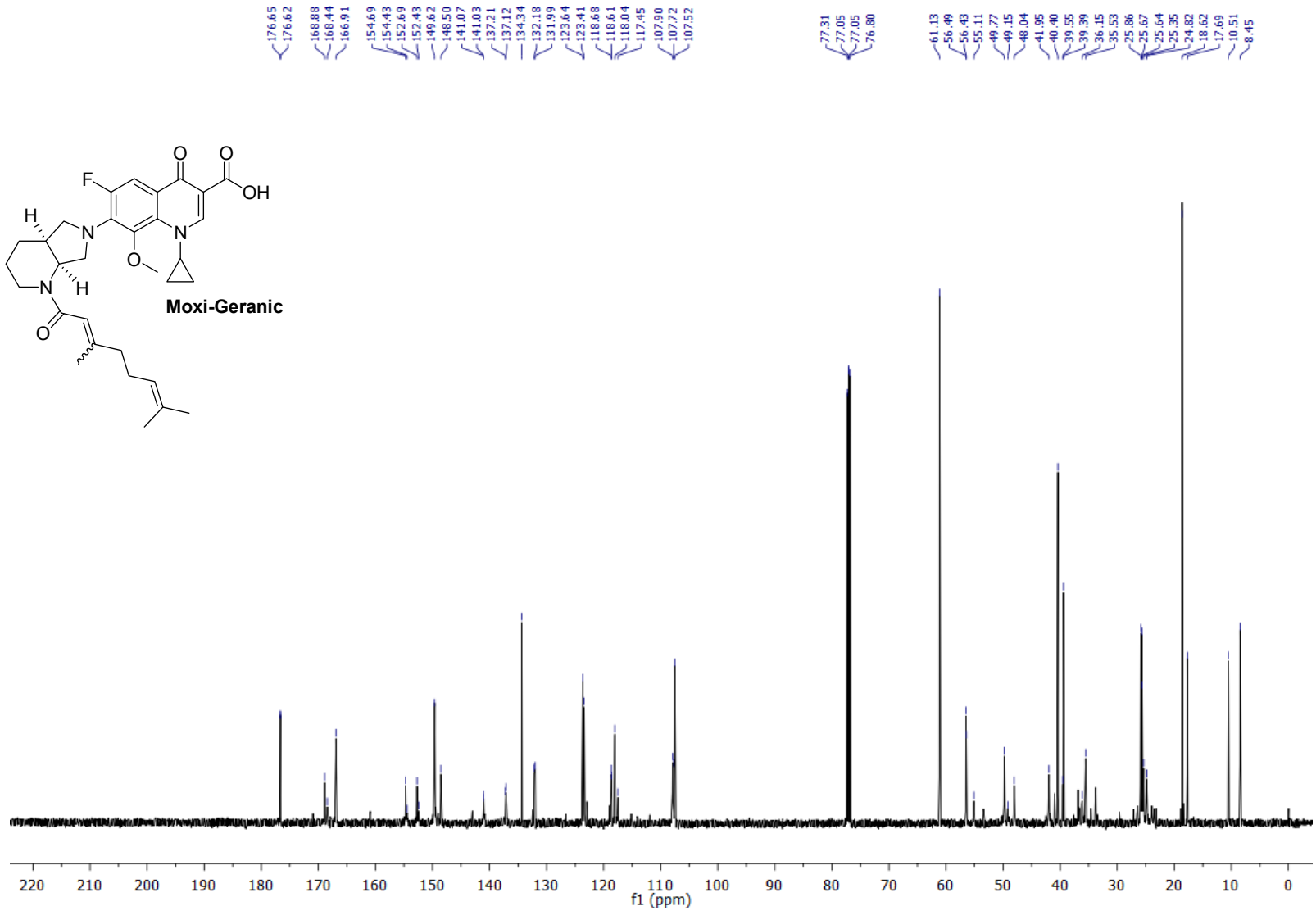
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Moxi-Geranic
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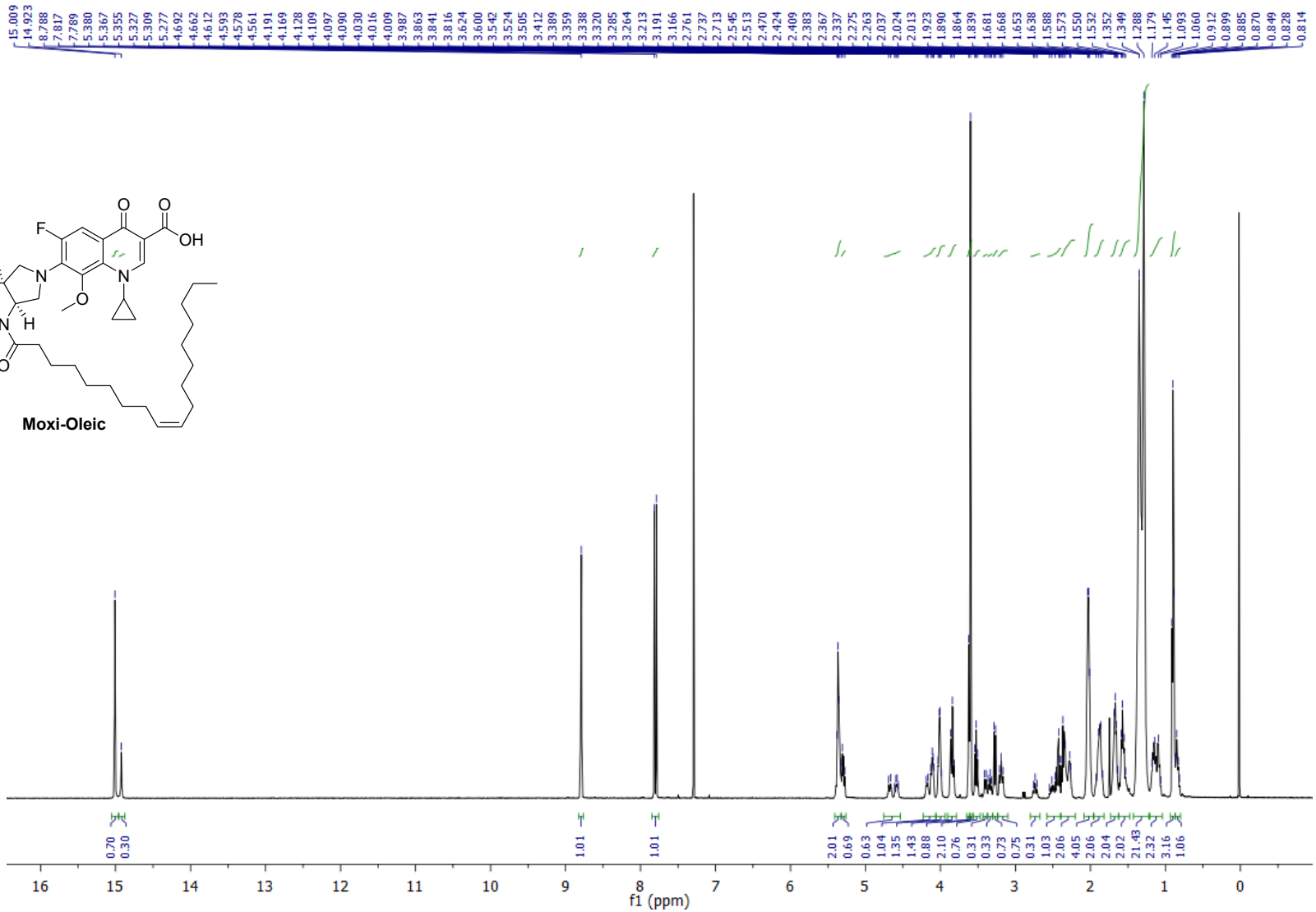
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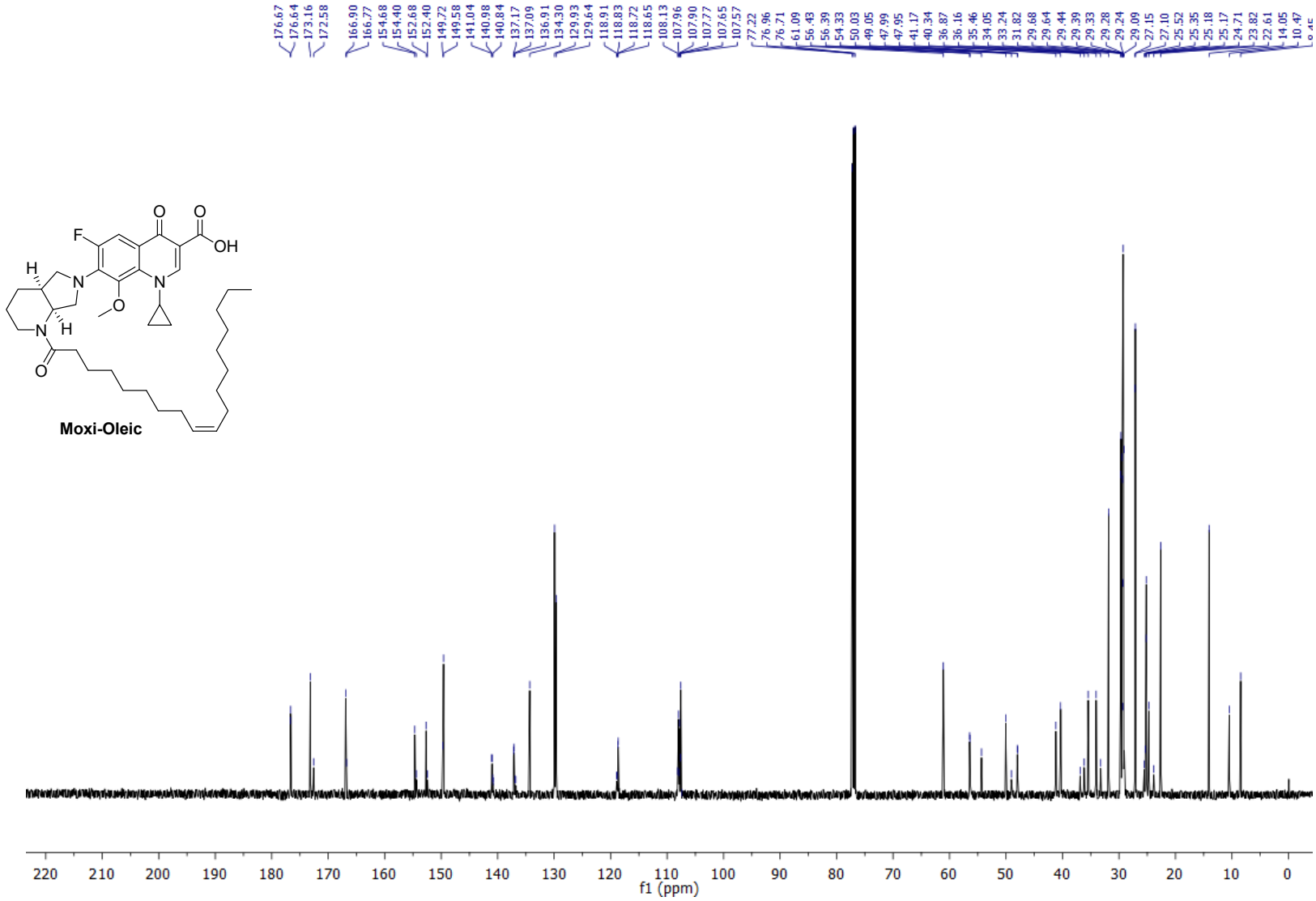
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49.05
47.99
47.95
41.17
40.34
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Moxi-Oleic
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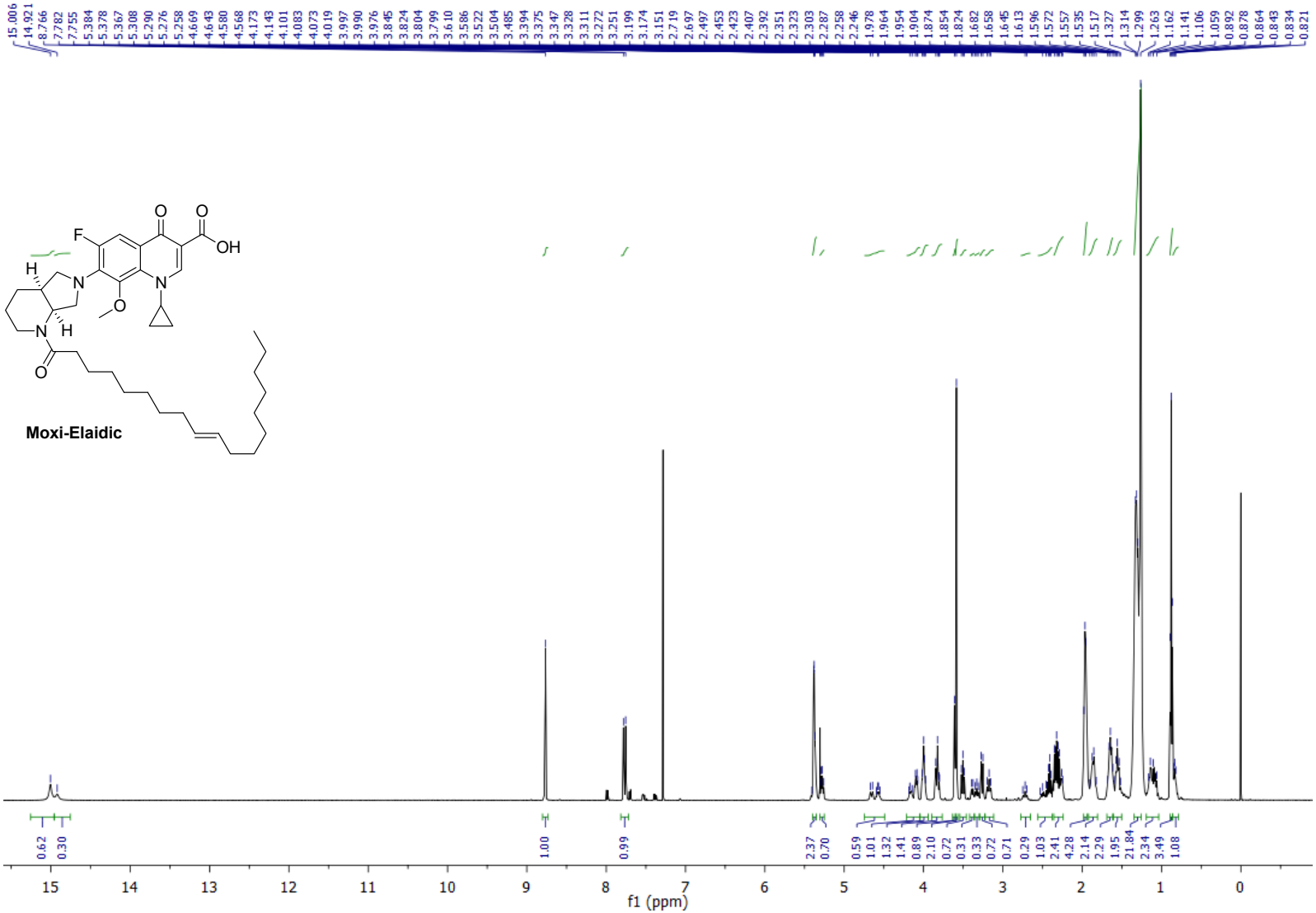
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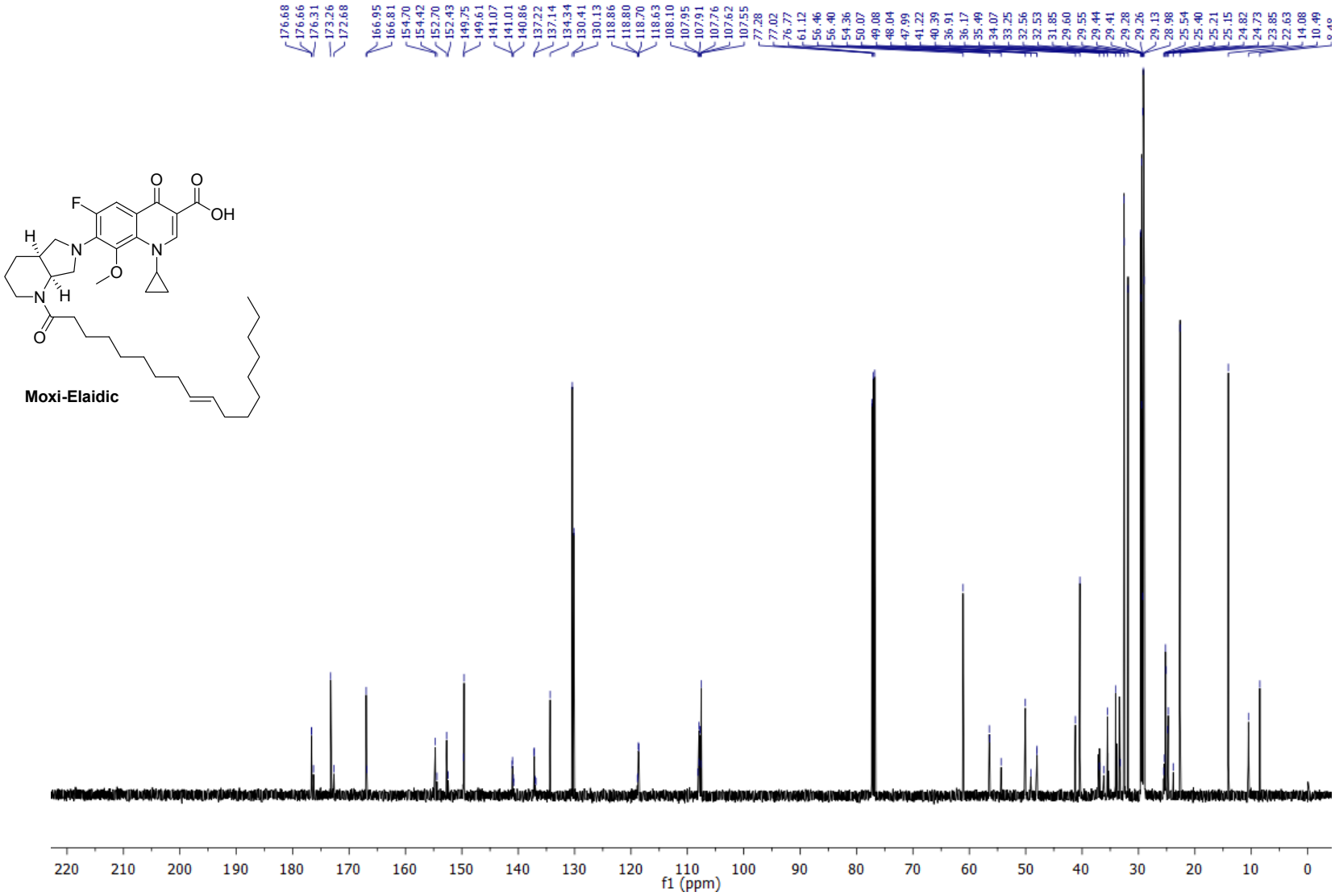
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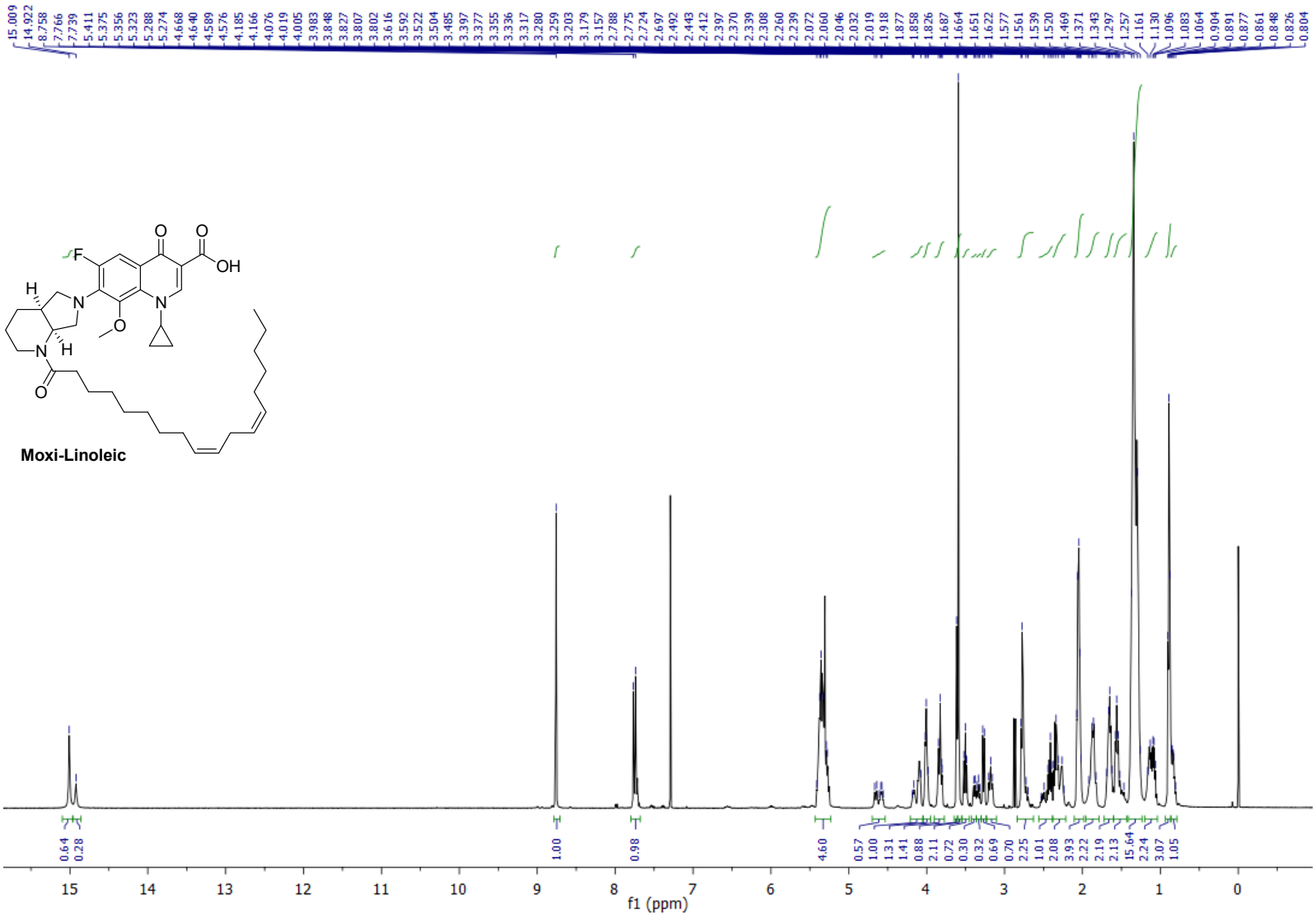
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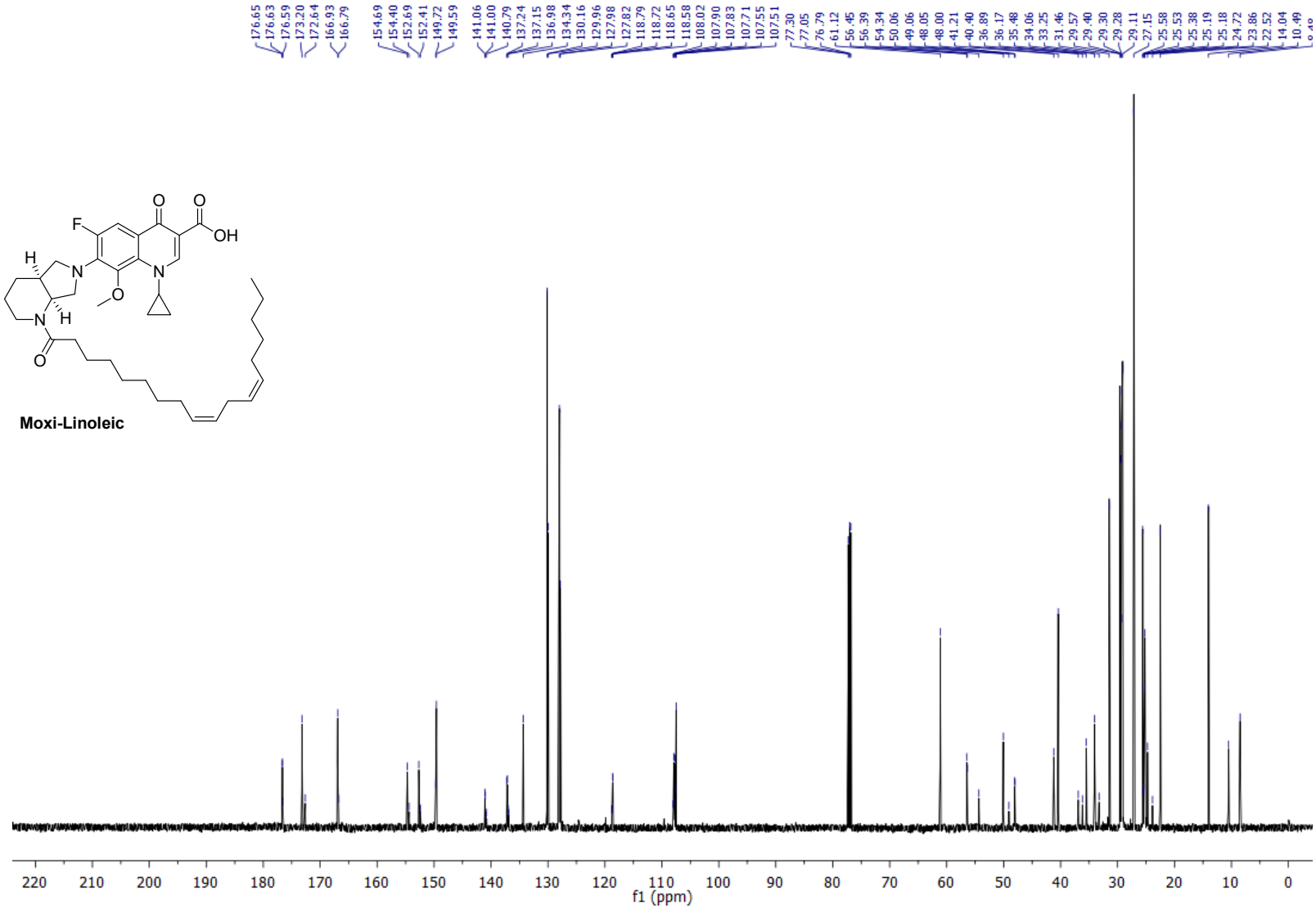
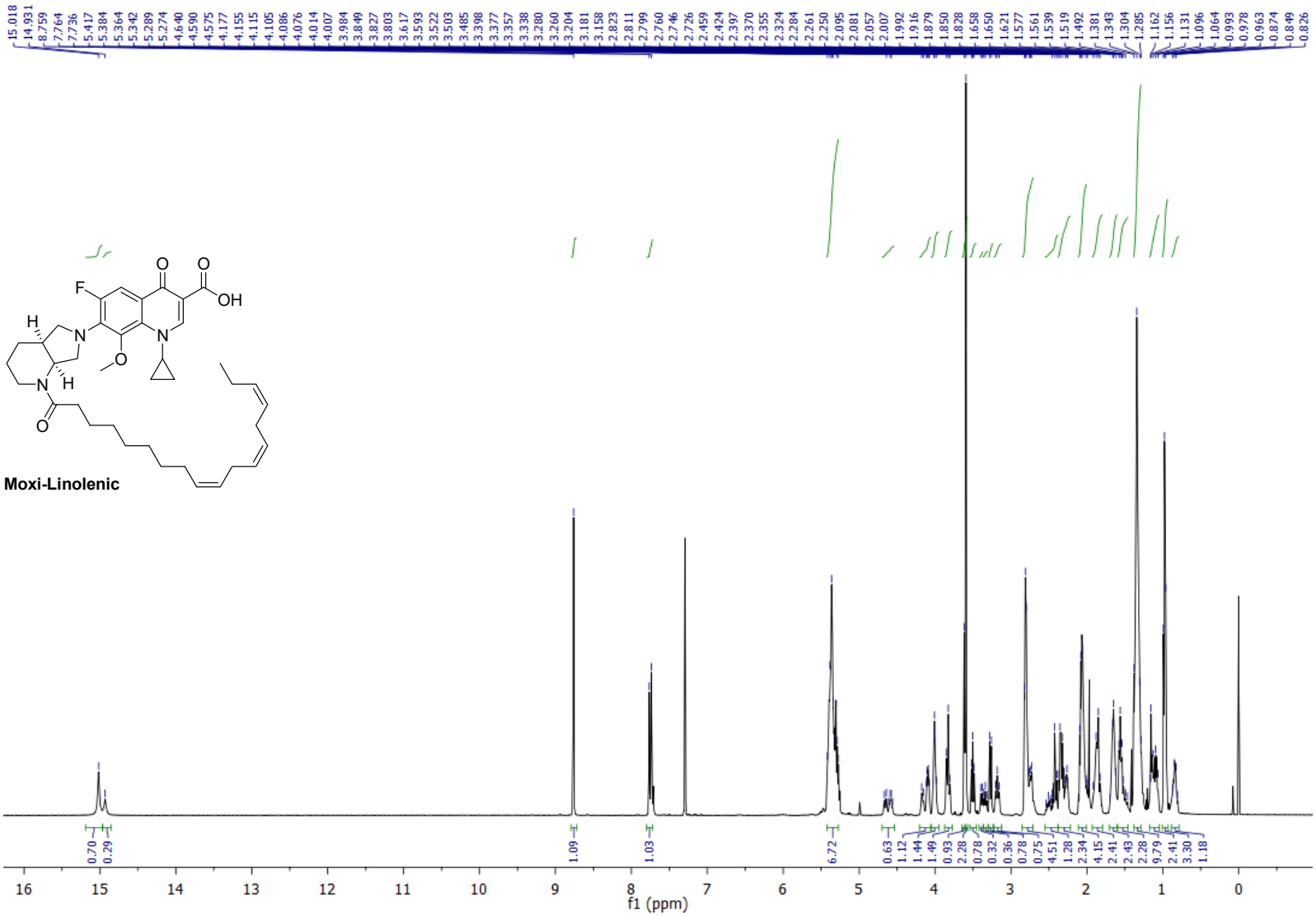
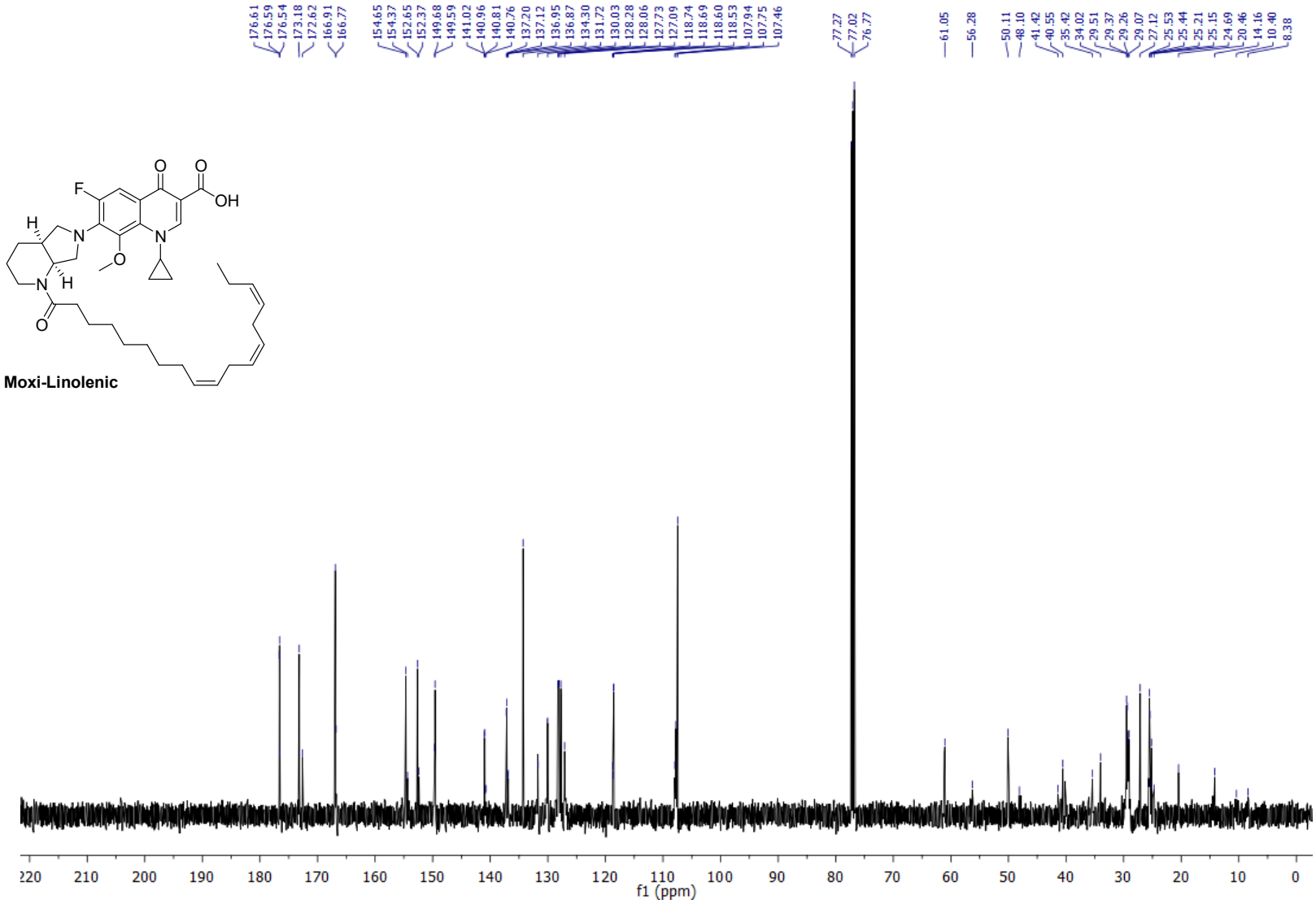

Moxi-Linoleic
f1 (ppm)


Moxi-Linolenic
f1 (ppm)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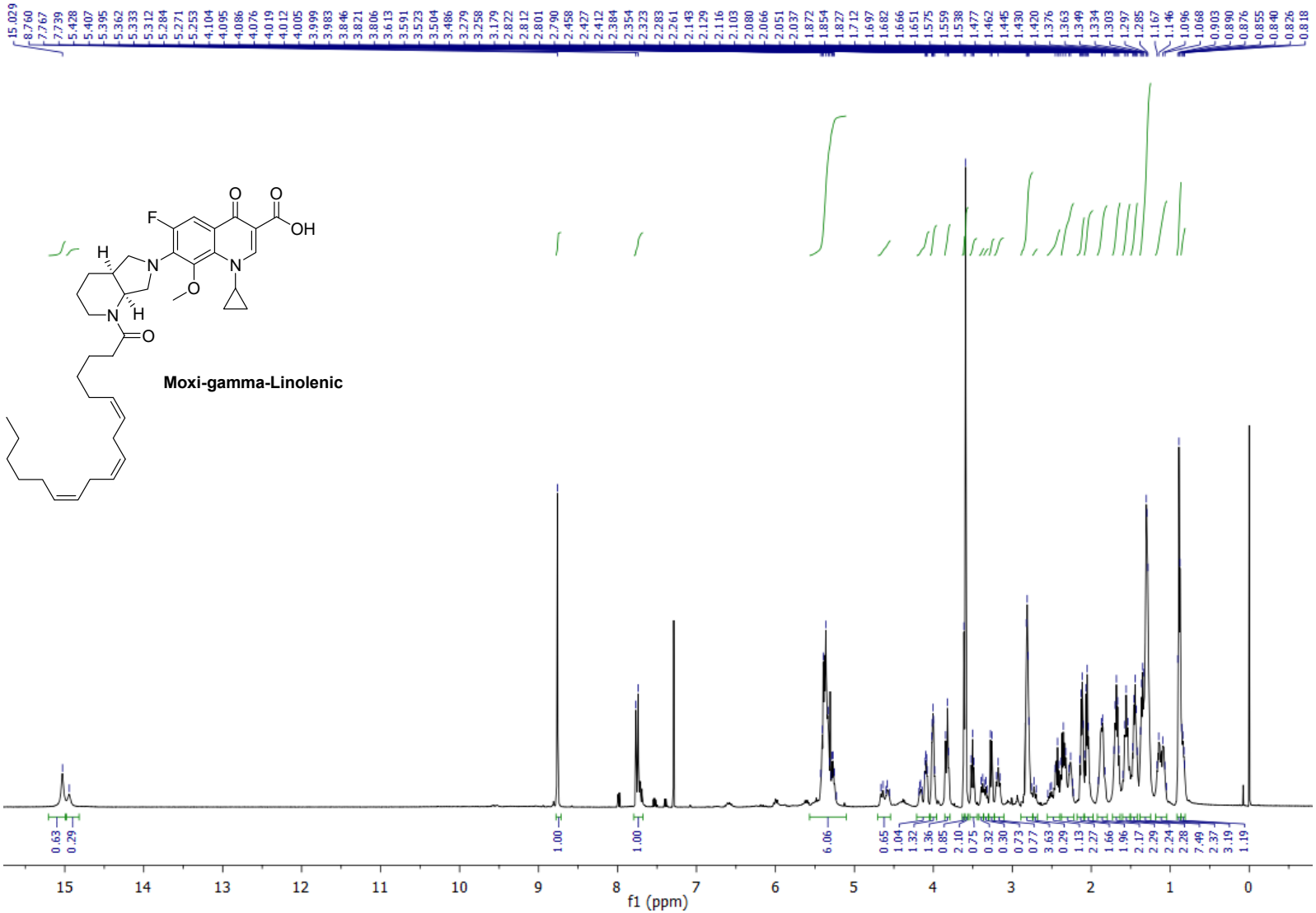
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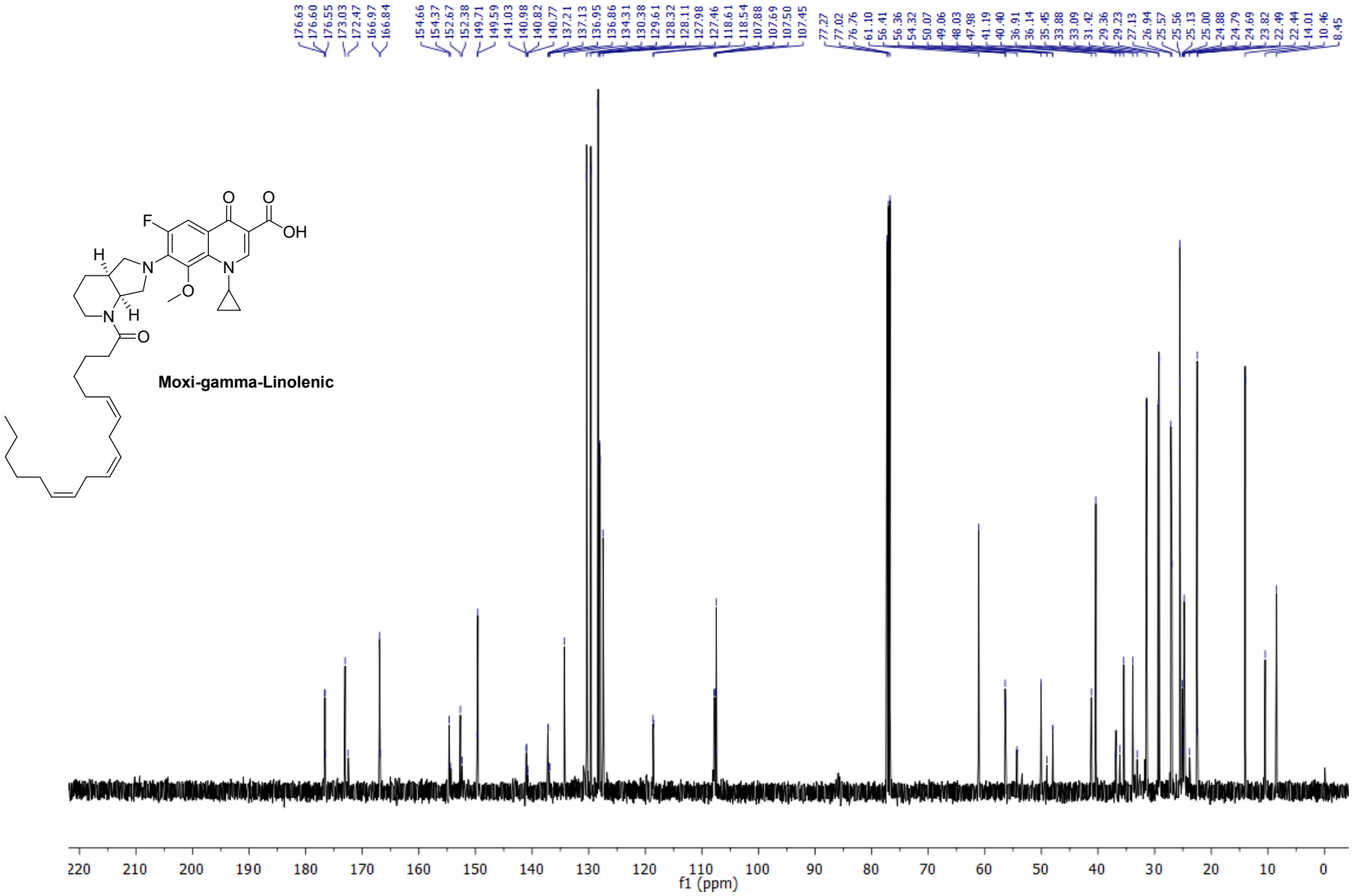
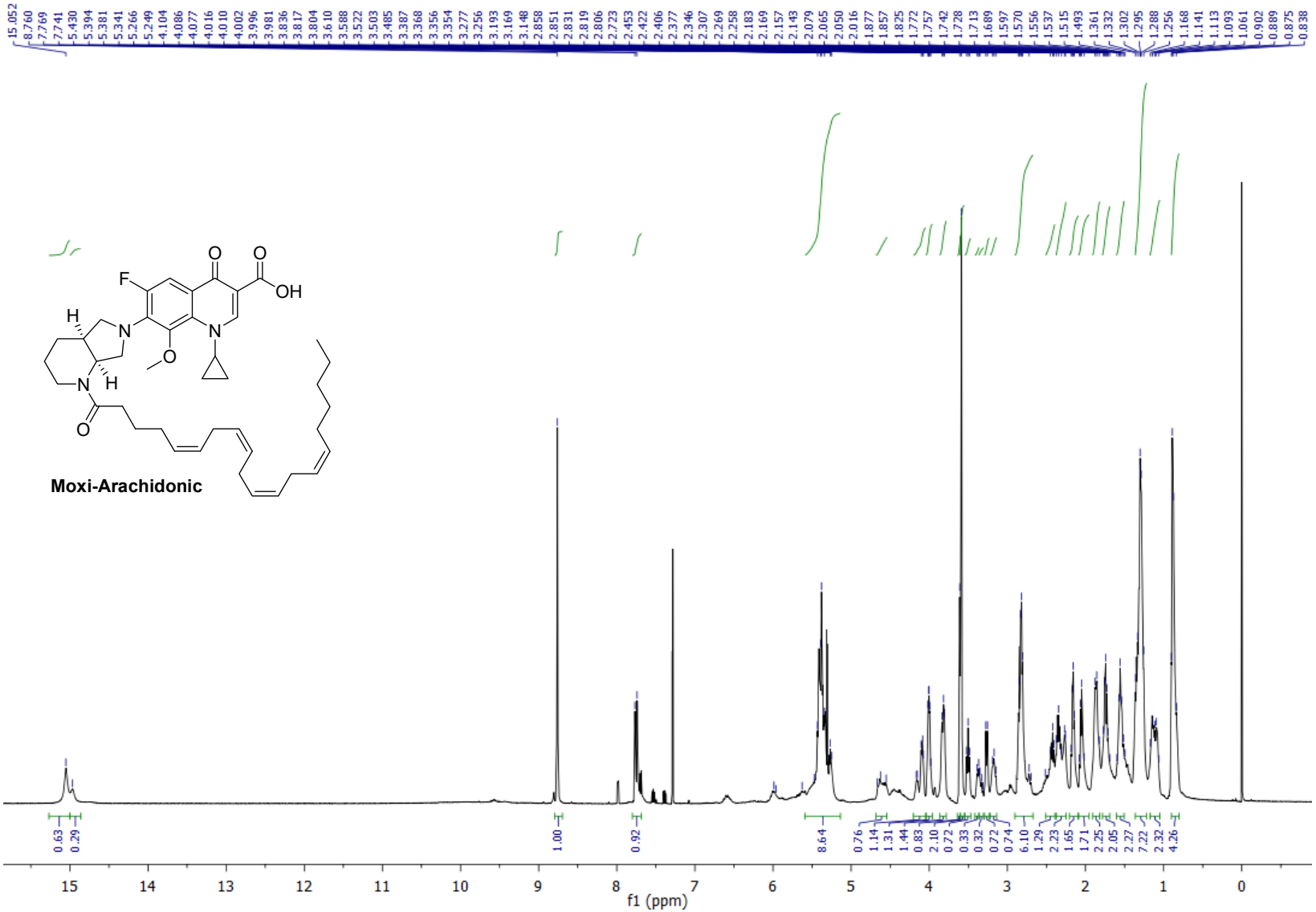
f1 (ppm)


Moxi-gamma-Linolenic
f1 (ppm)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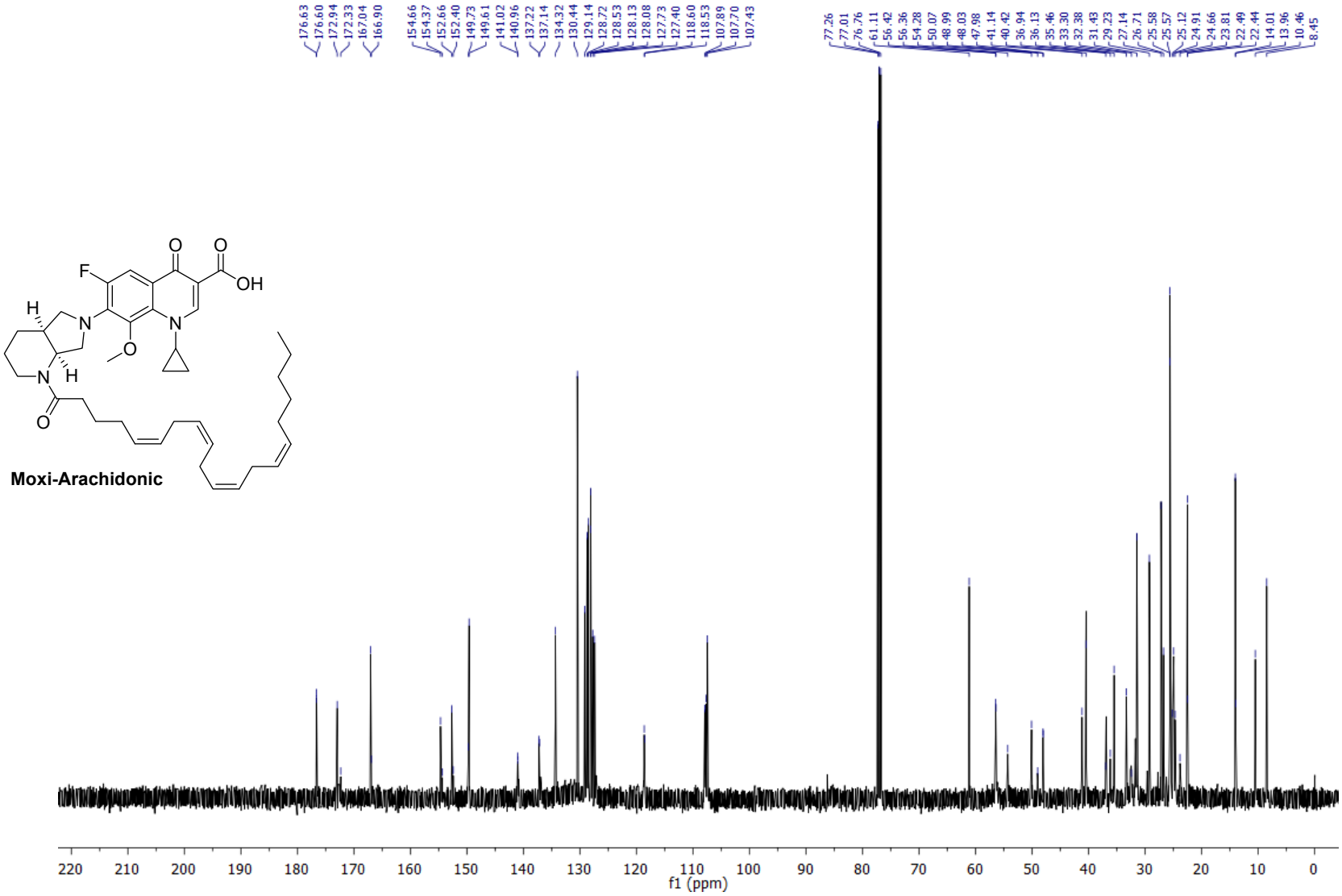
f1 (ppm)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10.46
8.45
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OH
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N
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O
N
H
O
Moxi-Arachidonic
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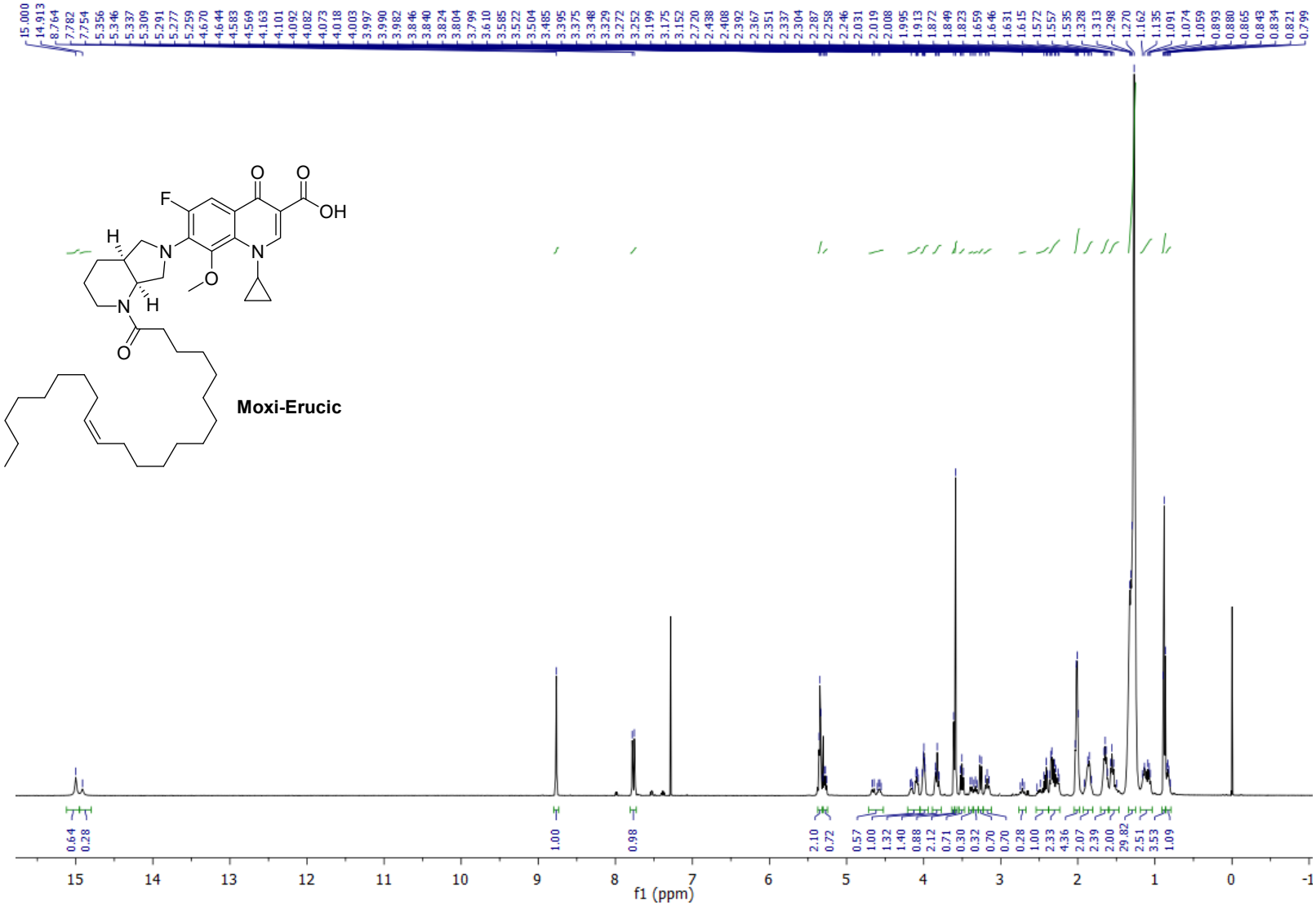
f1 (ppm)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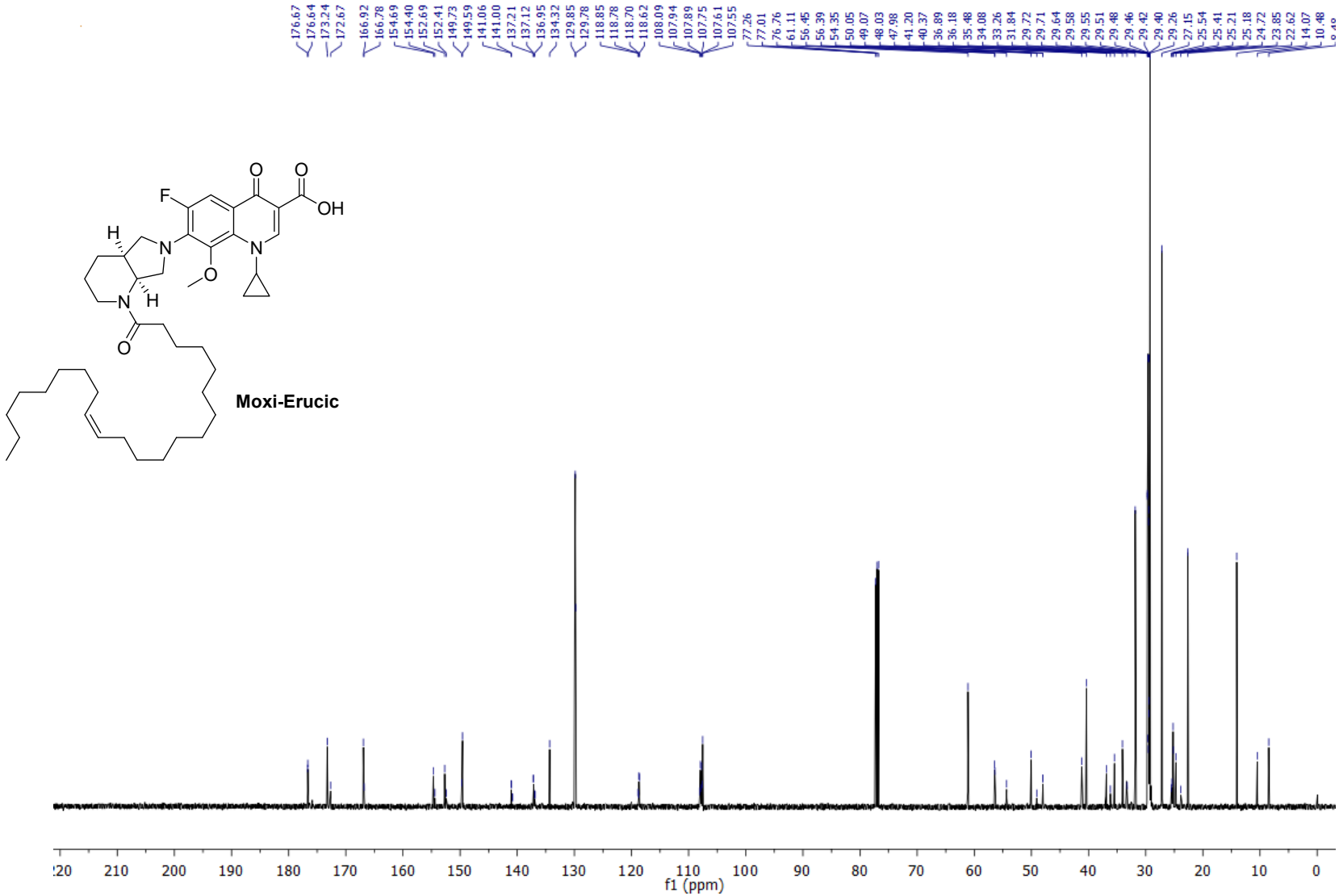
f1 (ppm)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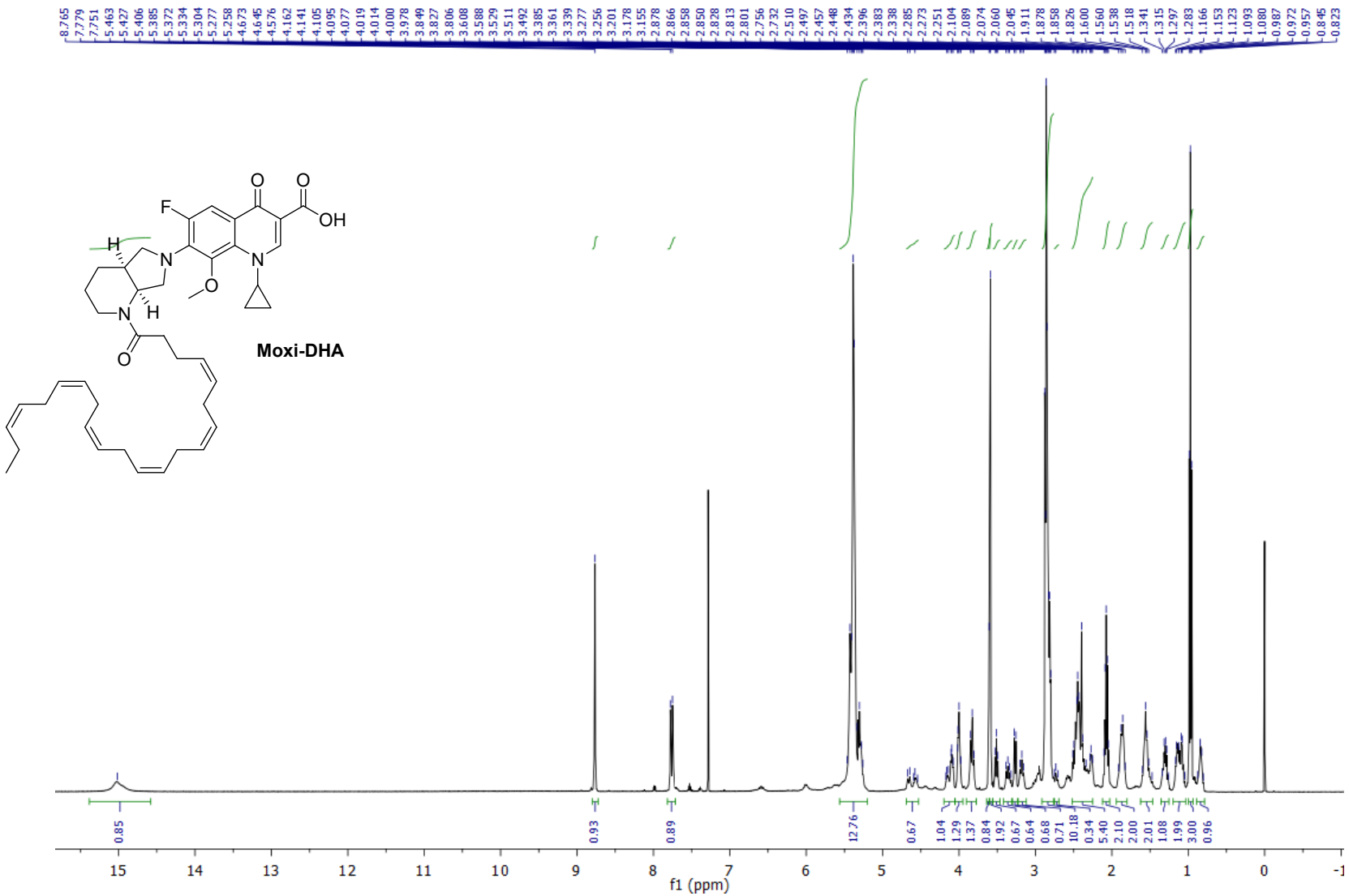
Moxi-DHA
f1 (ppm)

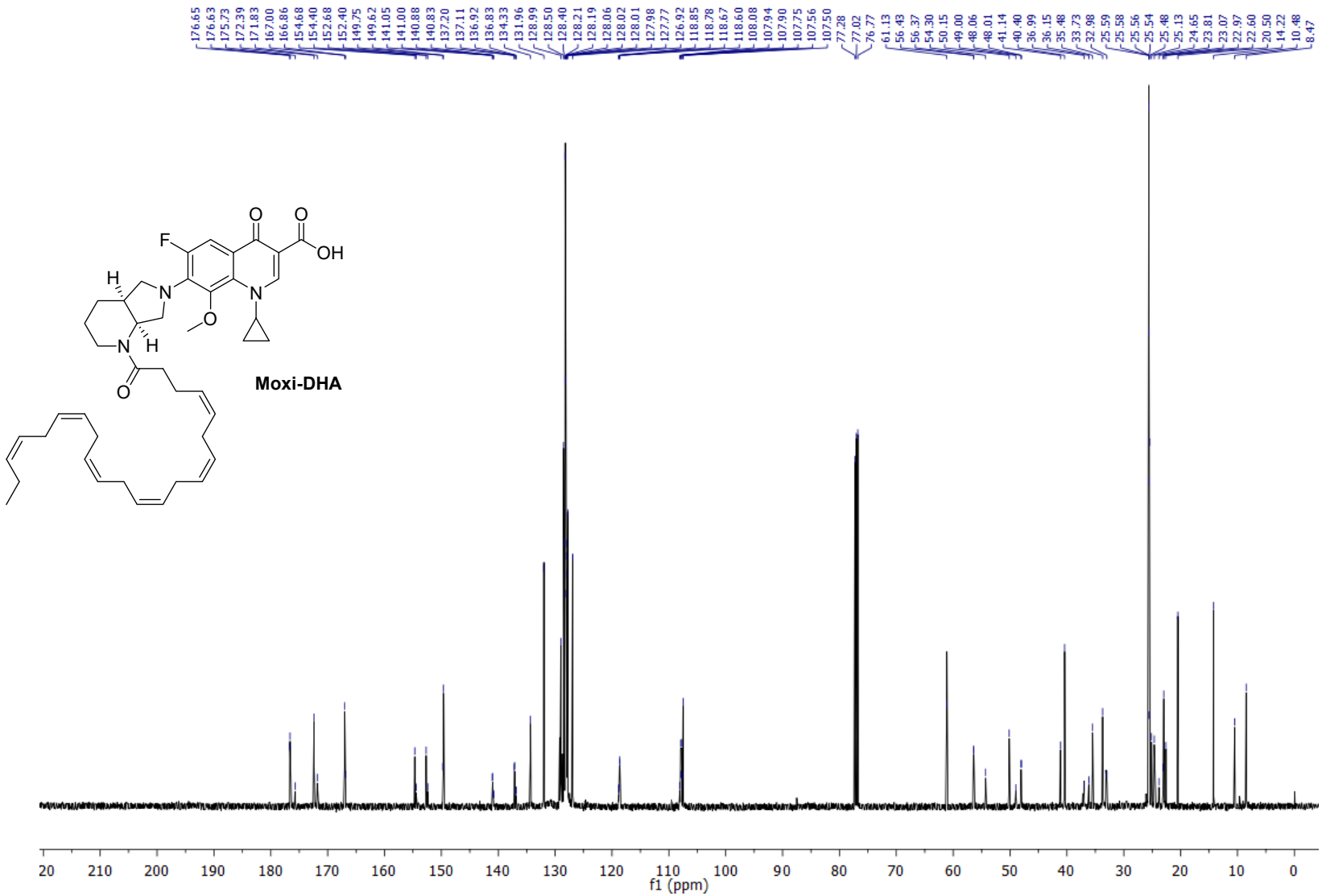
Moxi-DHA
f1 (ppm)

Table S1. Evaluation of resistance phenotype of clinical strains used in assays.

	BETA-LACTAMS		AMINOGLYCOSIDES	QUINOLONES	MACROLIDES/ LINCOSAMIDES/ STREPTOGRAMINS	OXAZOLIDINONE	GLYCOPEPTIDES	TETRACYCLINES	RIFAMYCINES	TRIMETHOPRIM/ SULFONAMIDES
KR 4047 825/19	MR	MODIFICATION OF PBP (mecA)	RESISTANT KAN TOB GEN (APH(2")+AAC(6'))	RESISTANT, PARTIALLY RESISTANT	MLSB CONSTITUTIVE, MLSB+SA CONSTITUTIVE	WILD	RESISTANT (TEC)	TARGET MODIFICATION (TET M),PARTIALLY RESISTANT (efflux tet K)	WILD	TRIMETHOPRIM RESISTANT, WILD
KR 4243 829/19	MR	MODIFICATION OF PBP (mecA)	RESISTANT KAN (APH(3")-III), WILD RESISTENT KAN TOB (ANT(4')(4")	WILD	MLSB INDUCIBLE	WILD	WILD	WILD, PARTIALLY RESISTANT (efflux tet K)	WILD	TRIMETHOPRIM RESISTANT, WILD
KR 4268 830/19	MR	MODIFICATION OF PBP (mecA)	RESISTANT KAN TOB GEN (APH(2")+AAC(6'))	WILD	MLSB INDUCIBLE	WILD	WILD	WILD	WILD	TRIMETHOPRIM RESISTANT, WILD
KR 4313 834/19	MR	MODIFICATION OF PBP (mecA)	RESISTANT KAN (APH(3")-III), WILD RESISTENT KAN TOB (ANT(4')(4")	WILD	MLSB CONSTITUTIVE, MLSB+SA CONSTITUTIVE	WILD	RESISTANT (TEC)	WILD, PARTIALLY RESISTANT (efflux tet K)	WILD	TRIMETHOPRIM RESISTANT, WILD
KR 4358/2 840/19	MR	MODIFICATION OF PBP (mecA)	RESISTANT KAN (APH(3")-III), WILD RESISTENT KAN TOB (ANT(4')(4")	WILD	WILD	WILD	WILD	WILD	WILD	RESISTANT
T 5253 845/19	MR	MODIFICATION OF PBP (mecA)	RESISTANT KAN TOB GEN (APH(2")+AAC(6'))	RESISTANT, PARTIALLY RESISTANT	WILD	WILD	WILD	WILD, PARTIALLY RESISTANT (efflux tet K)	WILD	RESISTANT
T 5399 848/19	MR	MODIFICATION OF PBP (mecA)	RESISTANT KAN (APH(3")-III), WILD RESISTENT KAN TOB (ANT(4')(4")	WILD	WILD	WILD	WILD	WILD, PARTIALLY RESISTANT (efflux tet K)	WILD	TRIMETHOPRIM RESISTANT, WILD
T 5501 851/19	MR	MODIFICATION OF PBP (mecA)	RESISTANT KAN TOB GEN (APH(2")+AAC(6'))	WILD	MLSB INDUCIBLE	WILD	WILD	WILD, PARTIALLY RESISTANT (efflux tet K)	WILD	TRIMETHOPRIM RESISTANT, WILD