

Supplementary Materials for

Large library docking for novel SARS-CoV-2 main protease non-covalent and covalent inhibitors

Elissa A. Fink^{1,2,†}, Conner Bardine^{1,3,†}, Stefan Gahbauer^{1,†}, Isha Singh^{1,†}, Tyler Detomasi¹, Kris White^{4,5}, Shuo Gu¹, Xiaobo Wan¹, Jun Chen¹, Beatrice Ary¹, Isabella Glenn¹, Joseph O'Connell¹, Henry O'Donnell¹, Pavla Fajtová⁶, Jiankun Lyu¹, Seth Vigneron¹, Nicholas J. Young¹, Ivan S. Kondratov^{7,8}, Arghavan Alisoltani⁹, Lacy M. Simons⁹, Ramon Lorenzo-Redondo⁹, Egon A. Ozer⁹, Judd F. Hultquist⁹, Anthony J. O'Donoghue⁶, Yurii Moroz^{10,11}, Jack Taunton¹², Adam R. Renslo¹, John J. Irwin¹, Adolfo García-Sastre^{4,5,13,14,15,16}, Brian K. Shoichet^{1,16,*}, Charles S. Craik^{1,16,*}

† These authors contributed equally.

* Corresponding author. Email: bshoichet@gmail.com (B.K.S.), charles.craik@ucsf.edu (C.S.C.)

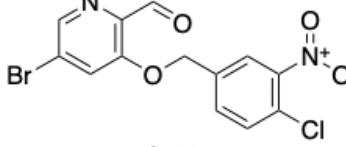
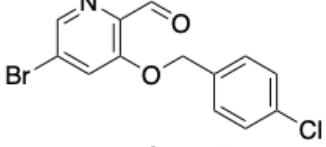
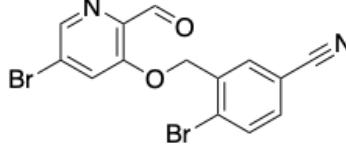
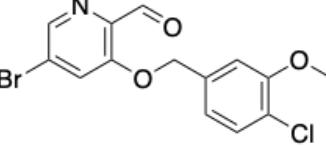
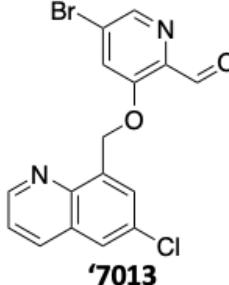
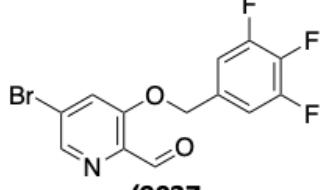
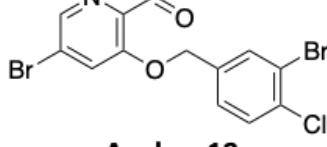
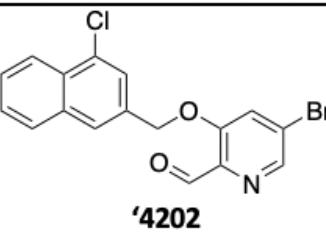
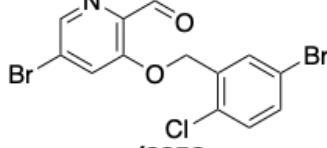
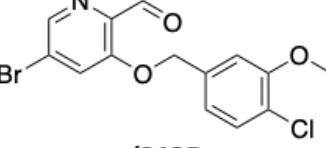
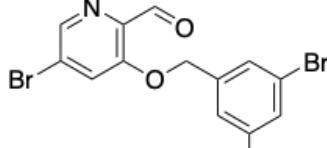
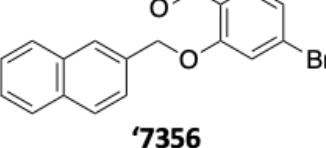
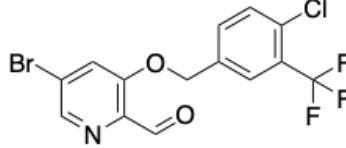
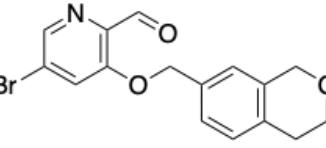
This document includes:

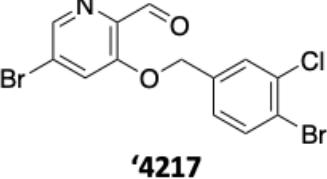
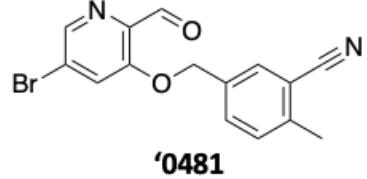
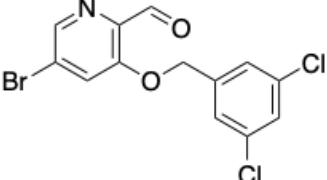
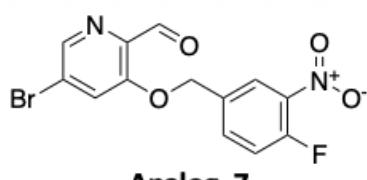
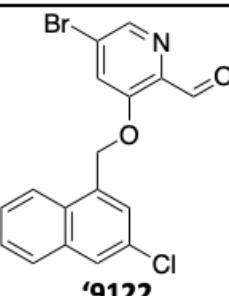
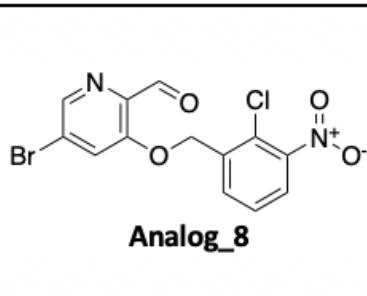
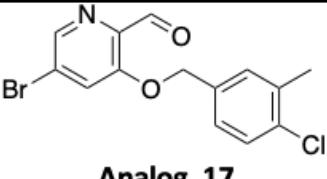
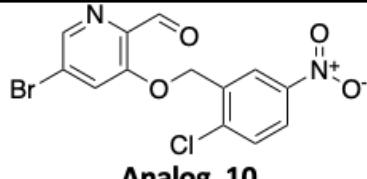
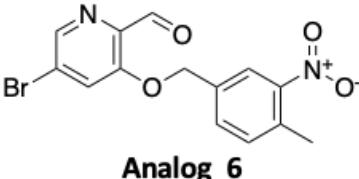
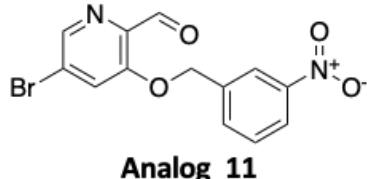
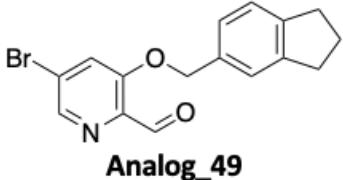
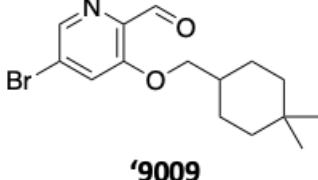
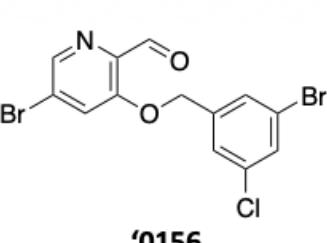
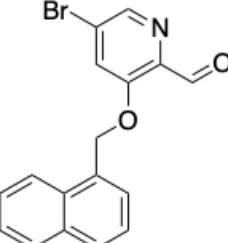
Tables S2 to S5
Figures S1 to S12

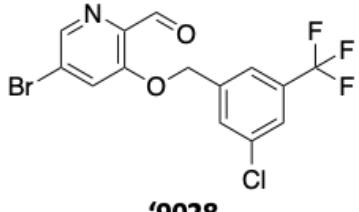
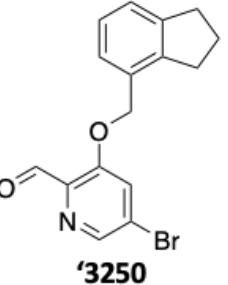
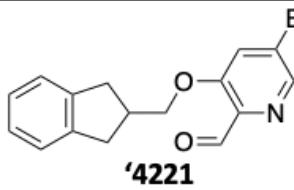
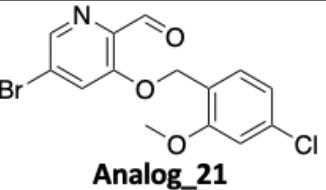
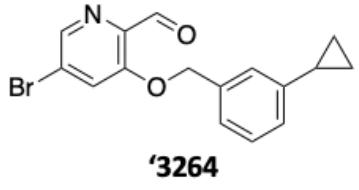
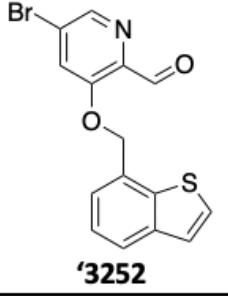
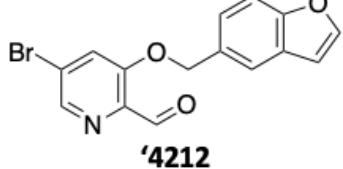
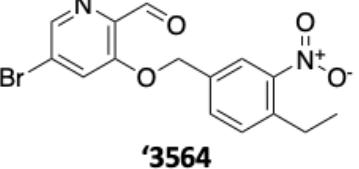
Other Supplementary Material for this manuscript includes the following:

Table S1 (.xlsx)

Supplementary Table 2. Analogs of covalent docking hit '3620 with improved potencies.

Compound	IC50 [μM]	Compound	IC50 [μM]
 '7021	1	 Analog_12	22
 '6690	2	 Analog_20	22
 '7013	5	 '9037	23
 Analog_18	6	 '4202	24
 '8252	6	 '9125	25
 '6117	7	 '7356	26
 Analog_19	9	 '8474	27

 '4217	9	 '0481	27
 '9033	9	 Analog_7	28
 '9122	9	 Analog_8	33
 Analog_17	11	 Analog_10	34
 Analog_6	12	 Analog_11	35
 Analog_49	13	 '9009	38
 '0156	14	 '3251	40

	14		40
	19		43
	20		45
	20		48

Supplementary Table 3. Antiviral activities.

Compound	Antiviral IC ₅₀ ^a [μM]	Antiviral IC ₉₀ ^a [μM]	CC ₁₀ ^b [μM]
'7021	6.2	7.3	8.03
'7356	19.53	19.9	6.93

^a Efficacy in RT-qPCR viral infectivity assay in X cells.

^b Reduction in cell viability (cytotoxicity).

Supplementary Table 4. Pan-viral enzymatic activities of '7021.

Viral M ^{Pro}	IC50 [μM]
MERS	50
SARS-CoV-1	8
SARS-CoV-2	1

Supplementary Table 5. Crystallographic statistics.

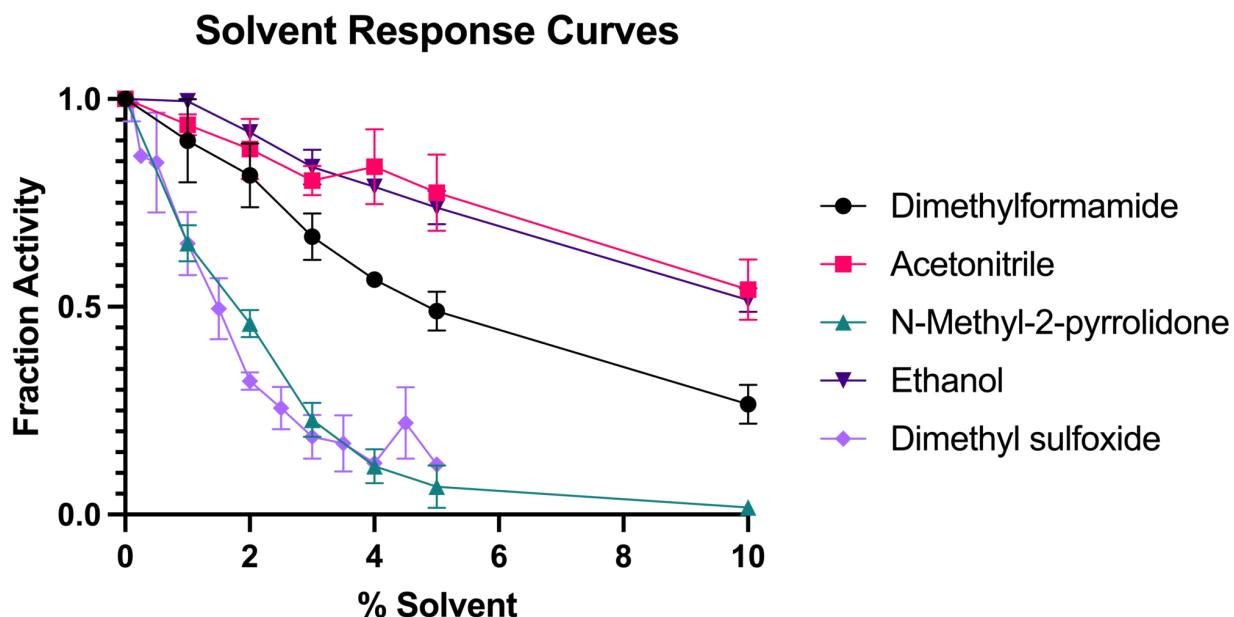
Ligand	'5548	'7356	'6111	SG-0001	'9121	'7021	'8252	'9218
PDB ID	8DIG	8DIF	8DIH	8DII	8DIC	8DIB	8DID	8DIE
Resolution range (Å)	72.62 - 2.45 (2.538 - 2.45)	48.44 - 1.98 (2.051 - 1.98)	44.39 - 2.12 (2.196 - 2.12)	48.6 - 2.59 (2.683 - 2.59)	38.13 - 2.09 (2.165 - 2.09)	38.73 - 2.17 (2.248 - 2.17)	38.22 - 1.95 (2.02 - 1.95)	38.64 - 1.9 (1.968 - 1.9)
Space group	P 21 21 21	P 1 21 1	C 1 2 1	I 1 2 1	P 1 21 1	P 1 21 1	P 1 21 1	P 1 21 1
a, b, c (Å)	67.779, 102.704, 102.704	44.897, 53.624, 115.04	114.102, 53.917, 45.258	45.041, 53.835, 115.11	44.346, 53.814, 115.824	44.911, 53.72, 115.527	44.238, 53.666, 115.632	44.923, 53.751, 115.119
a, b, c (°)	90, 90, 90	90, 101.151, 90	90, 101.253, 90	90, 101.13, 90	90, 100.459, 90	90, 100.833, 90	90, 100.938, 90	90, 101.062, 90
Total reflections	52786 (4222)	74588 (6993)	29895 (2343)	17080 (1724)	63019 (6332)	56799 (5689)	76834 (7688)	83998 (8382)
Unique reflections	26433 (2151)	37368 (3516)	14998 (1188)	8552 (864)	31556 (3170)	28435 (2848)	38463 (3848)	42036 (4194)
Multiplicity	2.0 (2.0)	2.0 (2.0)	2.0 (2.0)	2.0 (2.0)	2.0 (2.0)	2.0 (2.0)	2.0 (2.0)	2.0 (2.0)
Completeness (%)	97.69 (80.05)	99.03 (92.87)	96.99 (77.24)	99.74 (99.77)	98.17 (98.84)	98.18 (98.41)	98.14 (98.54)	94.67 (79.45)
Mean I/sigma(I)	10.82 (1.33)	13.42 (1.00)	19.51 (1.83)	8.81 (0.84)	8.94 (0.98)	8.68 (0.89)	7.58 (0.98)	4.57 (0.59)
Wilson B-factor	44.04	36.71	48.65	56.27	39.01	40.42	30.04	33.18
R-merge	0.05895 (0.6349)	0.0362 (0.8374)	0.01881 (0.4432)	0.06999 (0.9217)	0.05198 (0.7831)	0.05847 (0.8779)	0.05816 (0.7736)	0.1022 (1.824)
R-meas	0.08337 (0.8979)	0.0512 (1.184)	0.0266 (0.6267)	0.09899 (1.304)	0.07351 (1.107)	0.08269 (1.242)	0.08226 (1.094)	0.1446 (2.579)
R-pim	0.05895 (0.6349)	0.0362 (0.8374)	0.01881 (0.4432)	0.06999 (0.9217)	0.05198 (0.7831)	0.05847 (0.8779)	0.05816 (0.7736)	0.1022 (1.824)
CC1/2	0.997 (0.513)	1 (0.41)	1 (0.625)	0.995 (0.333)	0.999 (0.474)	0.998 (0.397)	0.998 (0.513)	0.993 (0.201)
CC*	0.999 (0.823)	1 (0.763)	1 (0.877)	0.999 (0.707)	1 (0.802)	1 (0.754)	1 (0.823)	0.998 (0.579)
Refinement								
Reflections used in refinement	26397 (2118)	37312 (3502)	14996 (1188)	8548 (862)	31513 (3163)	28394 (2844)	38390 (3844)	40479 (3371)
Reflections used for R-free	1317 (116)	1835 (176)	723 (54)	419 (45)	1615 (173)	1341 (143)	1894 (224)	2128 (174)
R-work	0.2138 (0.3321)	0.2432 (0.3608)	0.2114 (0.3256)	0.2164 (0.3640)	0.2275 (0.3419)	0.2267 (0.3265)	0.2574 (0.3563)	0.2534 (0.3559)
R-free	0.2717 (0.3771)	0.2955 (0.3532)	0.2760 (0.3358)	0.2672 (0.3837)	0.2764 (0.3772)	0.2814 (0.3331)	0.2915 (0.4119)	0.3032 (0.3935)
CC(work)	0.954 (0.748)	0.957 (0.639)	0.964 (0.698)	0.957 (0.515)	0.959 (0.639)	0.962 (0.651)	0.954 (0.698)	0.953 (0.502)
CC(free)	0.922 (0.479)	0.953 (0.613)	0.963 (0.738)	0.947 (0.420)	0.932 (0.465)	0.955 (0.574)	0.948 (0.514)	0.916 (0.400)
Number of non-hydrogen atoms	4589	4365	2317	2347	4502	4579	4531	4604
macromolecules	4540	4269	2267	2310	4433	4506	4413	4509
ligands	25	42	25	25	38	42	38	42
solvent	24	54	25	12	31	31	80	53
Protein residues	601	585	303	303	599	599	591	605
RMS(bonds)	0.008	0.01	0.008	0.002	0.009	0.004	0.015	0.009
RMS(angles)	0.94	0.99	1.01	0.57	0.98	0.7	1.14	0.92
Ramachandran favored (%)	94.76	97.68	96.62	96.66	97.23	98.11	97.33	97.45
Ramachandran allowed (%)	5.24	2.32	3.38	3.34	2.6	1.72	2.49	2.38
Ramachandran outliers (%)	0	0	0	0	0.17	0.17	0.18	0.17
Rotamer outliers (%)	0	0.23	0	0	0.43	0	0.21	0
Clashscore	7.5	3.99	4.71	5.48	6.71	3.84	8.22	5.1

Average B-factor	49.4	40.26	56.53	63.66	44.1	48.58	33.91	37.93
macromolecules	49.35	40.11	56.35	63.09	43.98	48.12	33.78	37.84
ligands	60.21	54.15	73.4	122.98	61.63	99.97	55.66	50.55
solvent	48.32	41.14	55.62	49.68	39.64	46.39	30.93	35.8

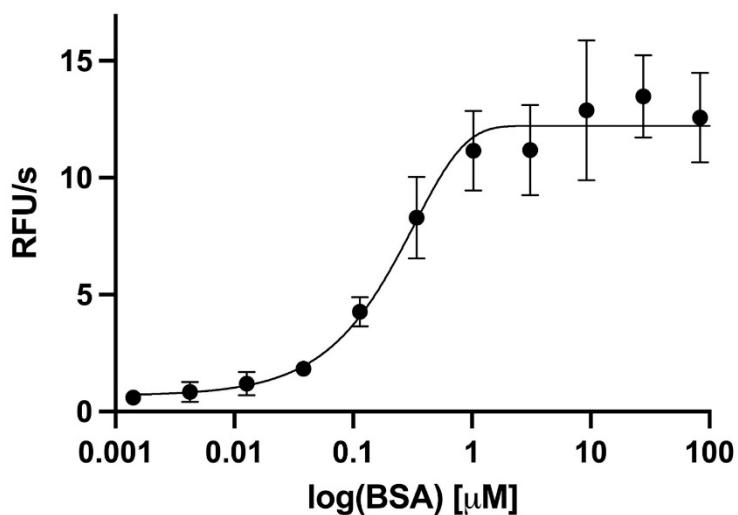
(One crystal for each structure)

* Values in parentheses are for the highest-resolution shell.

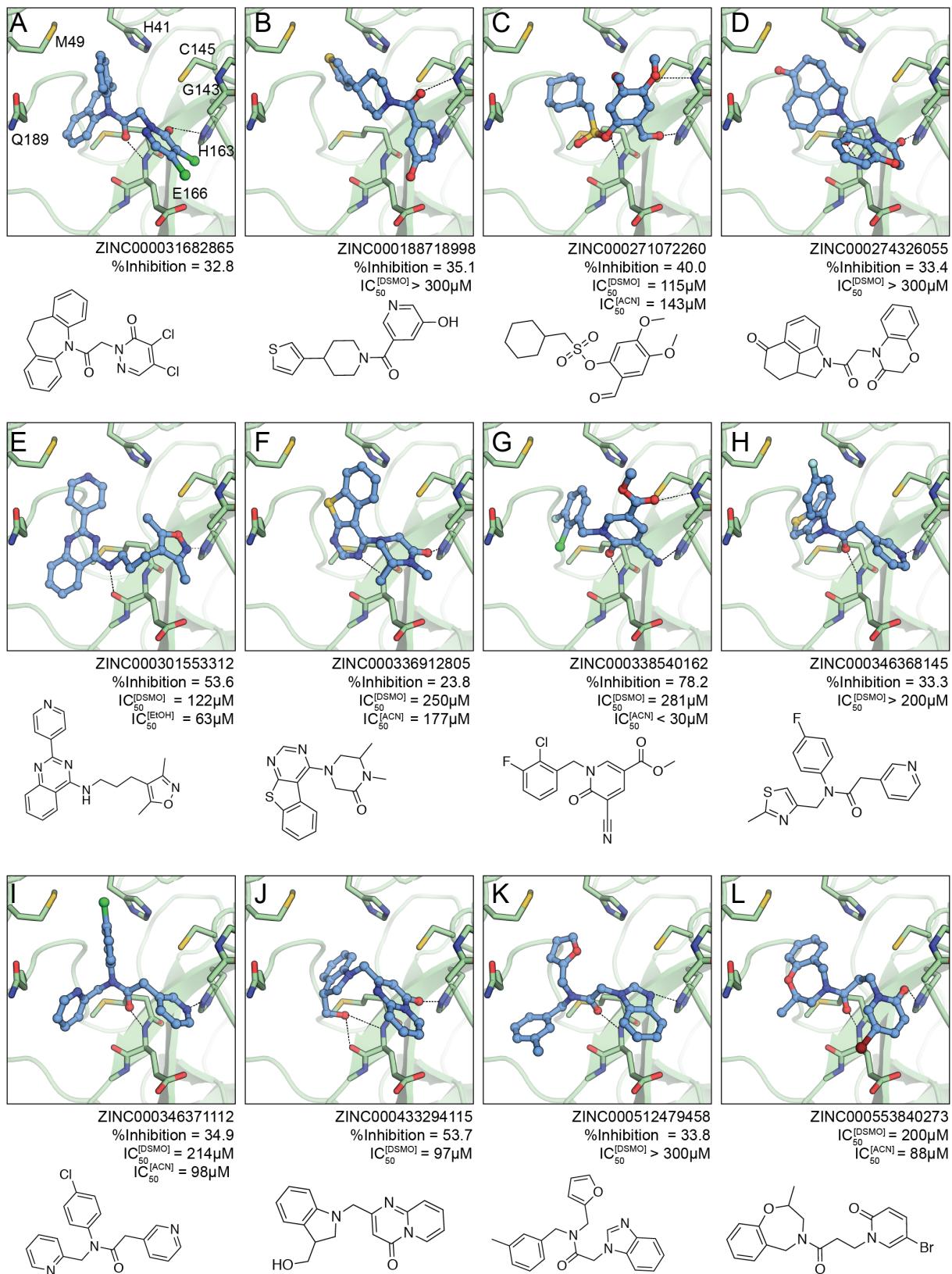
A



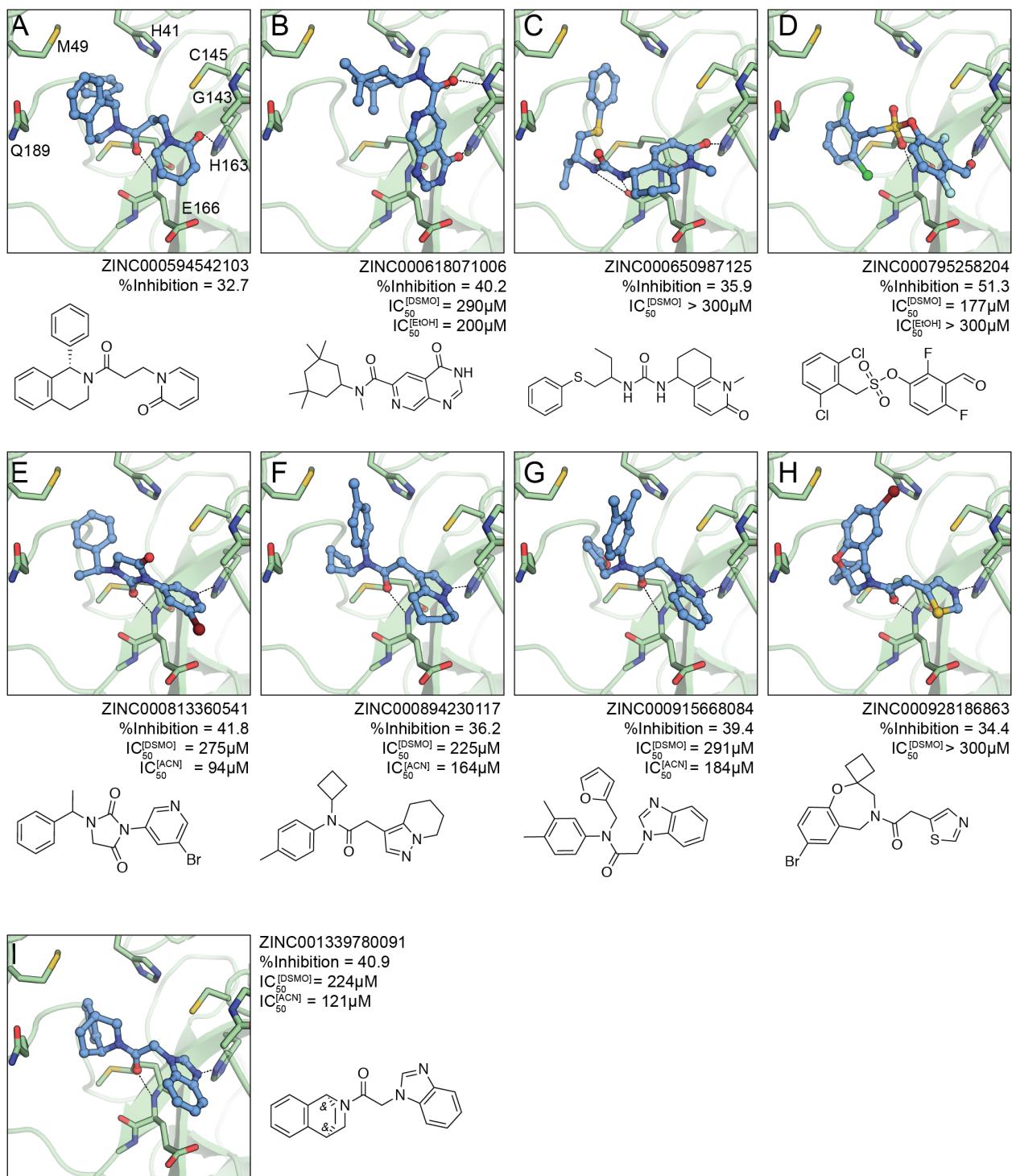
B



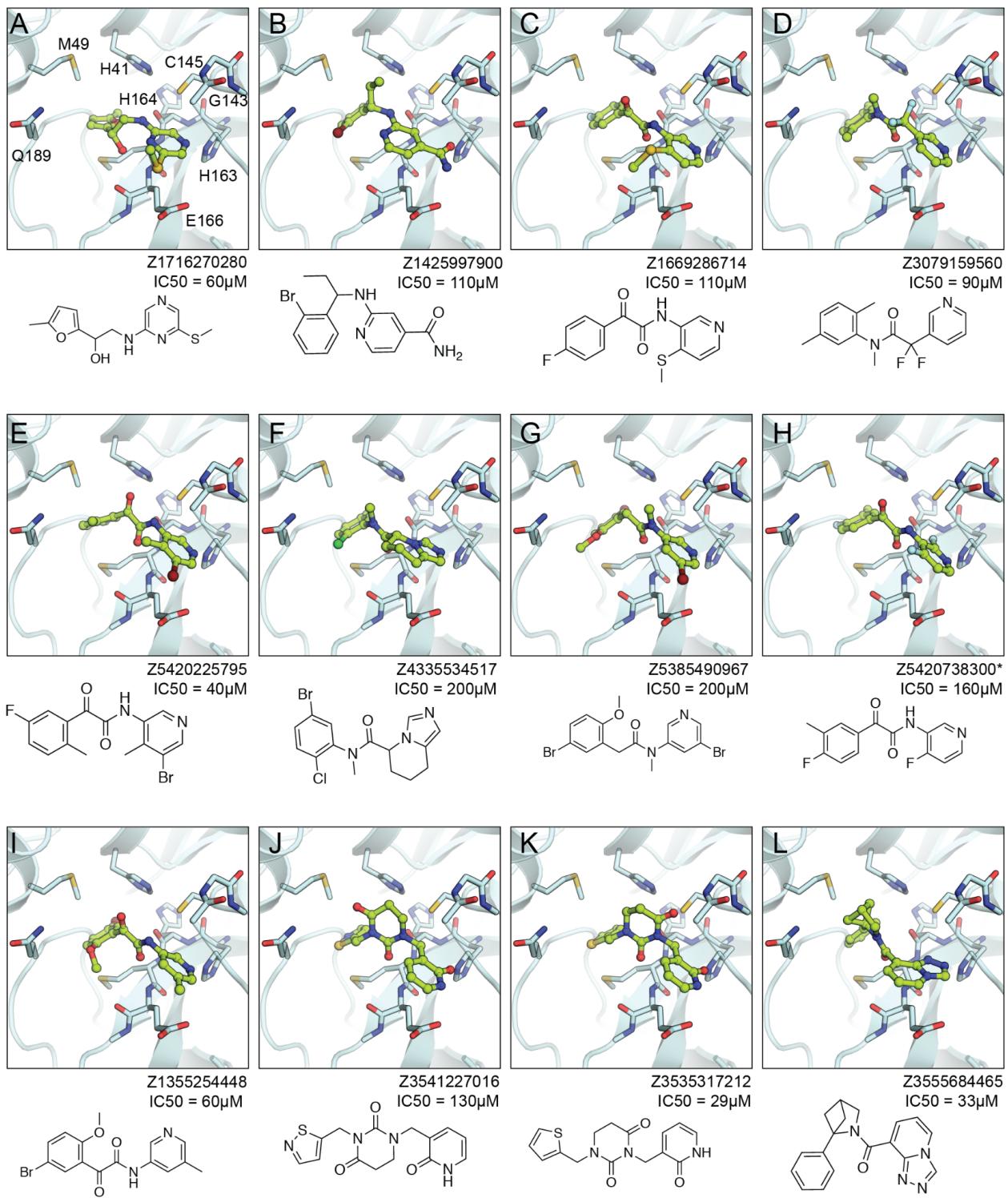
Supplementary Figure 1. Assay optimization for solvent and detergent. (A) The effect of solvents on enzymatic activity of M^{Pro}. (B) Activity loss from removal of detergent rescued with addition of BSA.



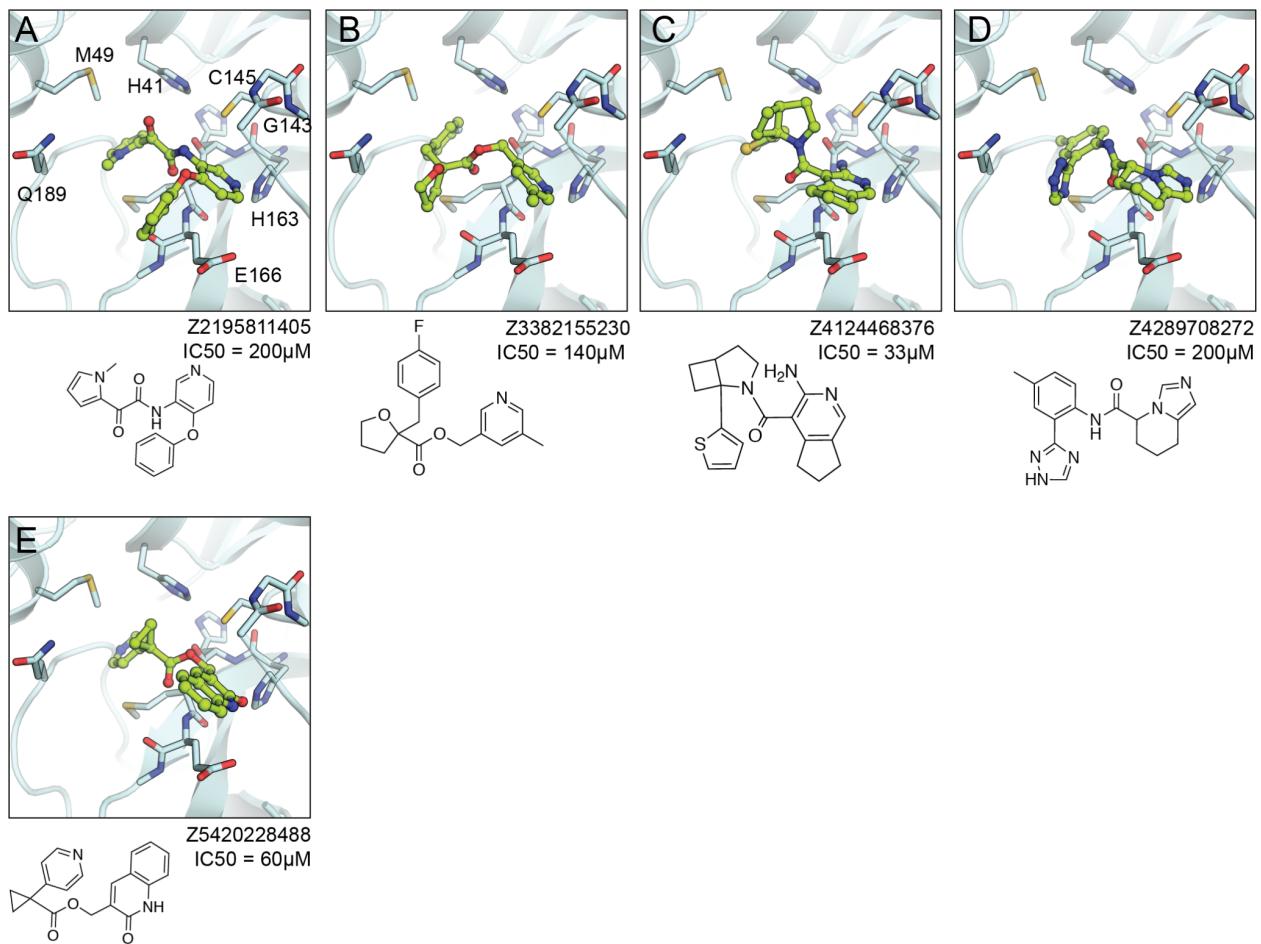
Supplementary Figure 2.1 Non-covalent docking hits or compounds with >30% inhibition from first virtual screen.



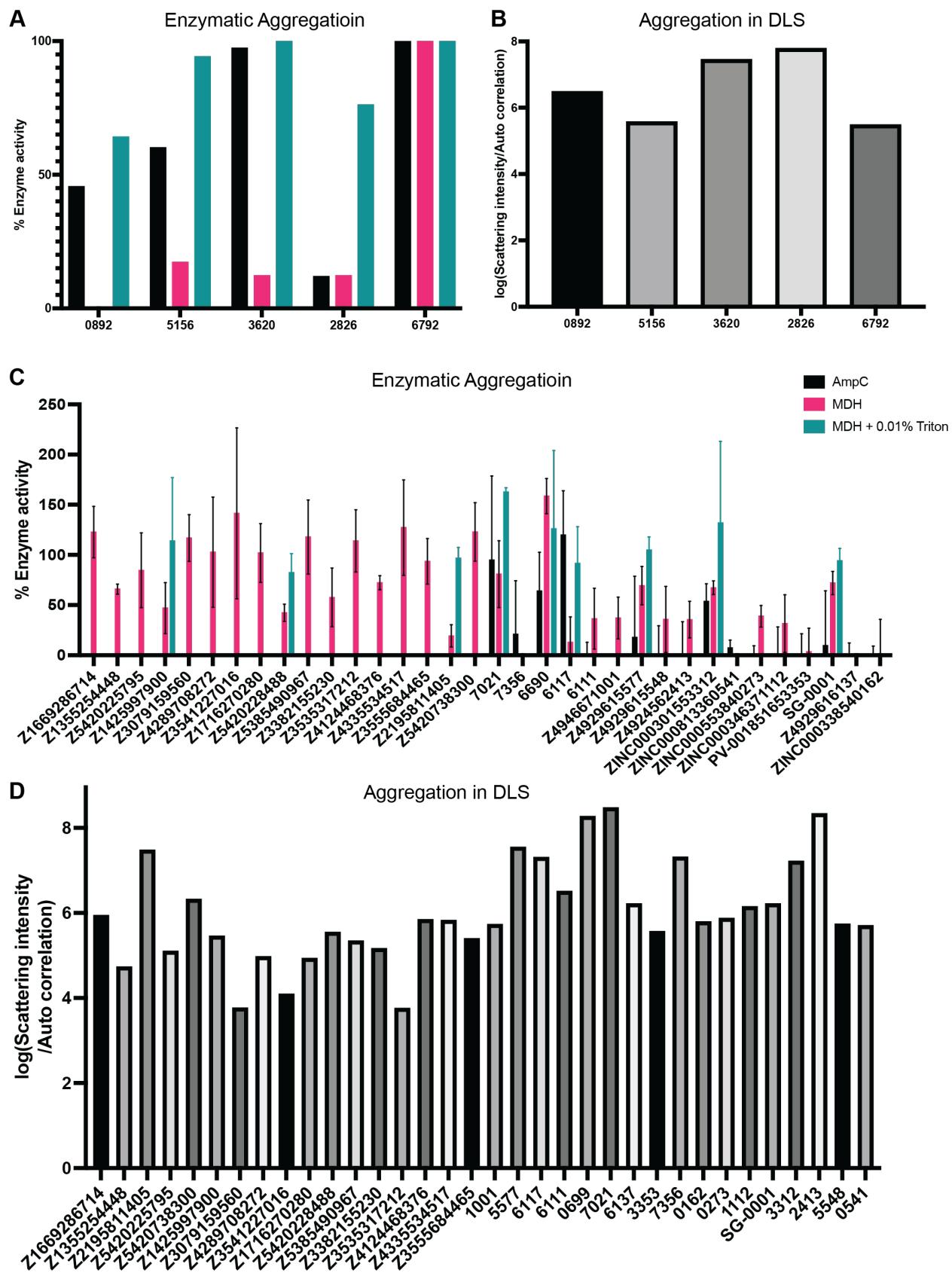
Supplementary Figure 2.2 Non-covalent docking hits or compounds with >30% inhibition from first virtual screen.



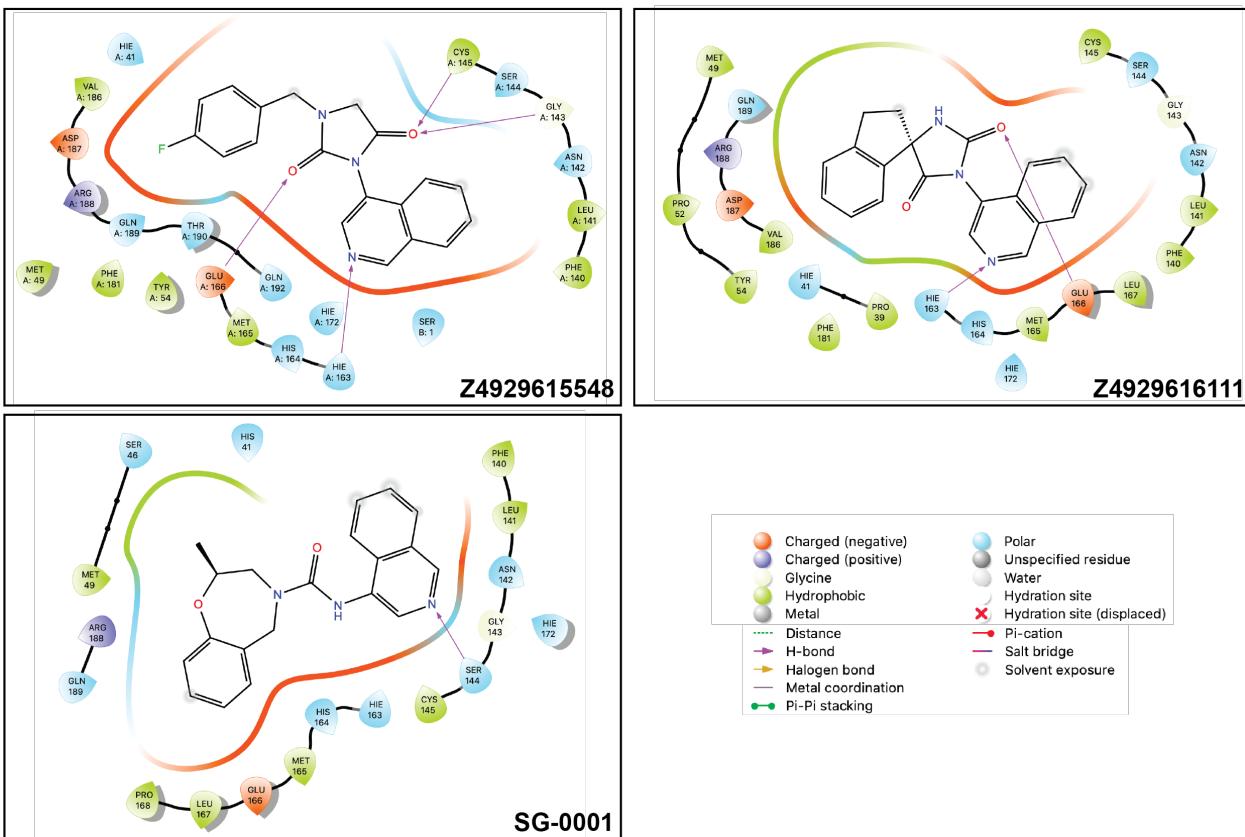
Supplementary Figure 2.3 Non-covalent docking hits from second virtual screen.



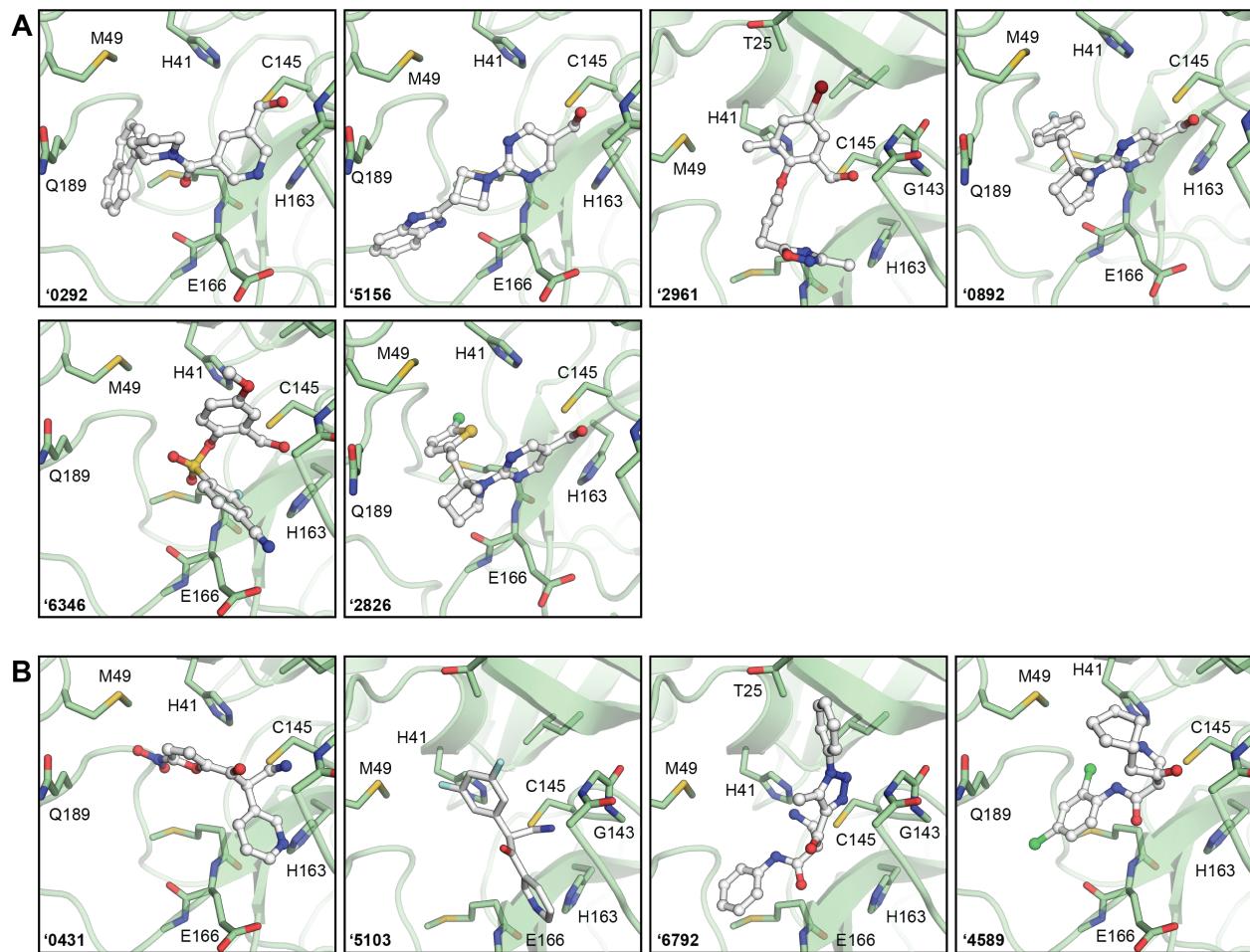
Supplementary Figure 2.4 Non-covalent docking hits from second virtual screen.



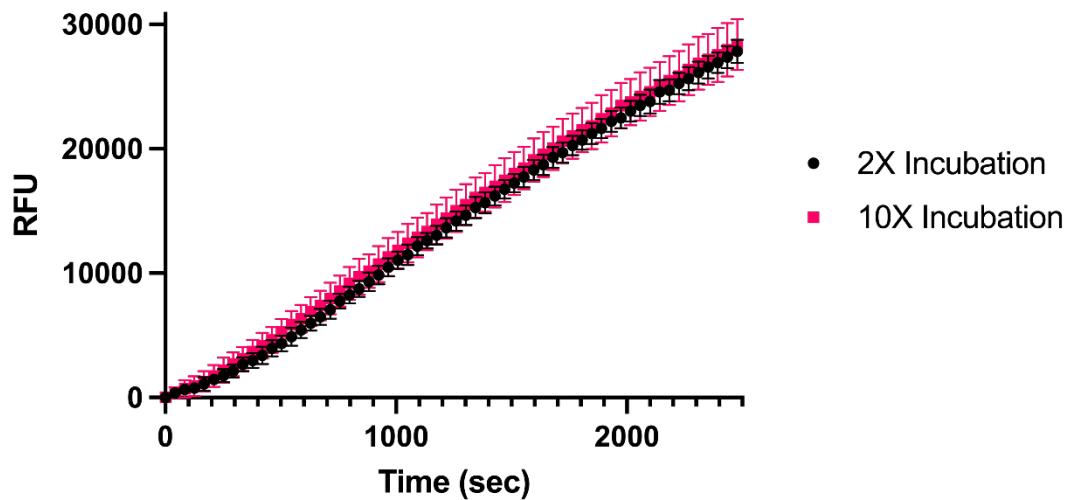
Supplementary Figure 3. Evaluating aggregation potential of initial docking hits and potent analogs. (A,C) Enzymatic inhibition by aggregation tested against AmpC and MDH (with or without 0.01% Triton X-100 detergent). (B,D) Compounds observed in DLS for forming colloidal-like particles where values above 10^6 have the potential for aggregating.



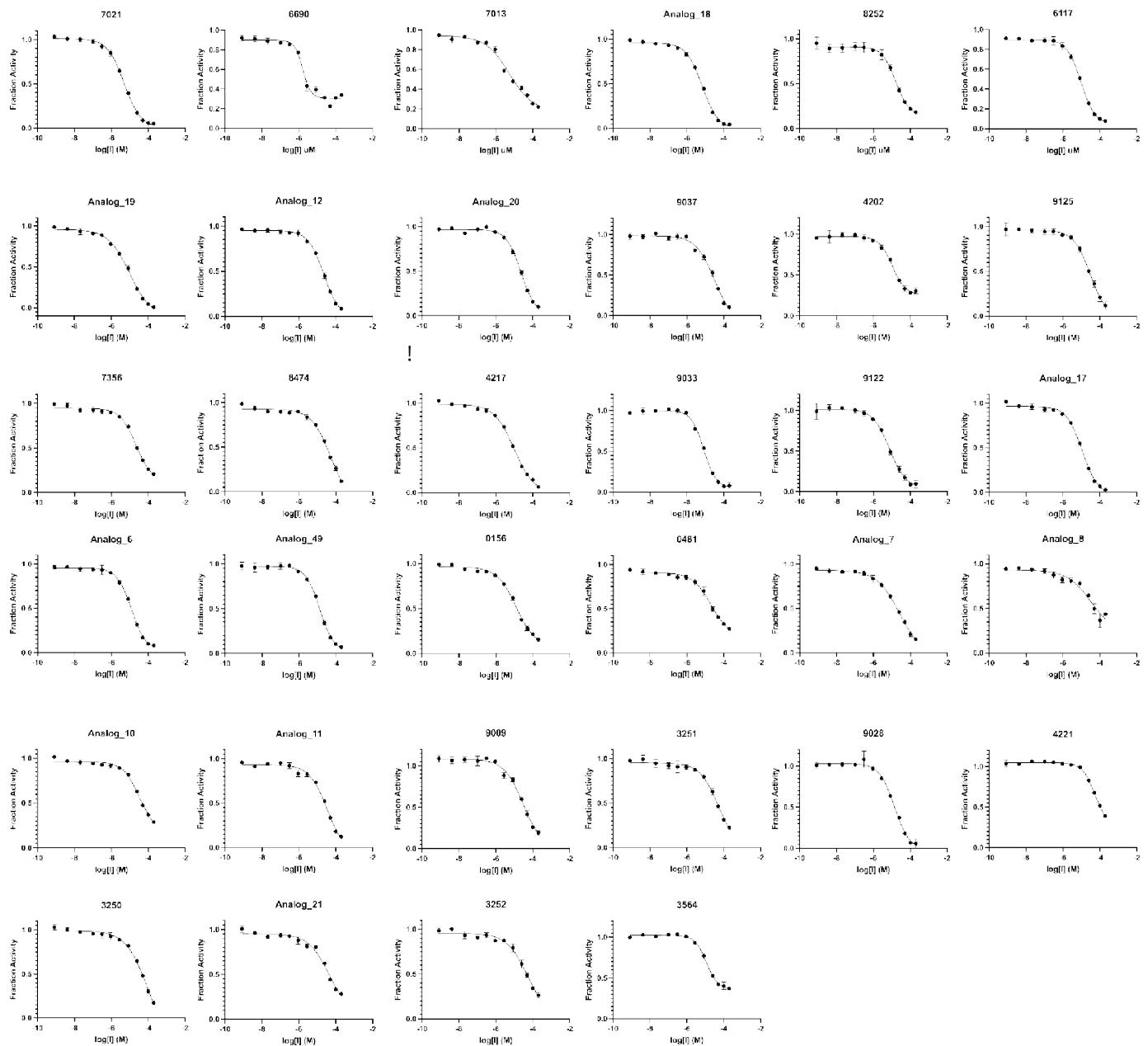
Supplementary Figure 4. LigPlot visualization of M^{Pro}-noncovalent inhibitor interactions in newly solved structures.



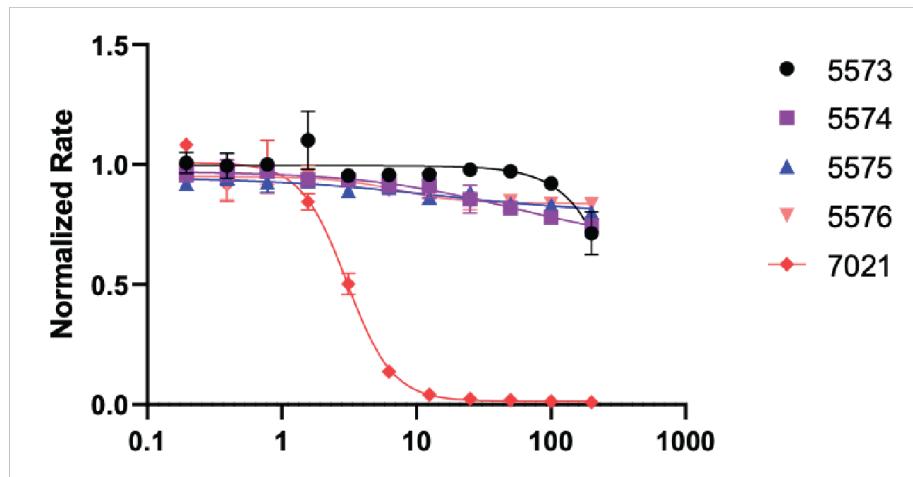
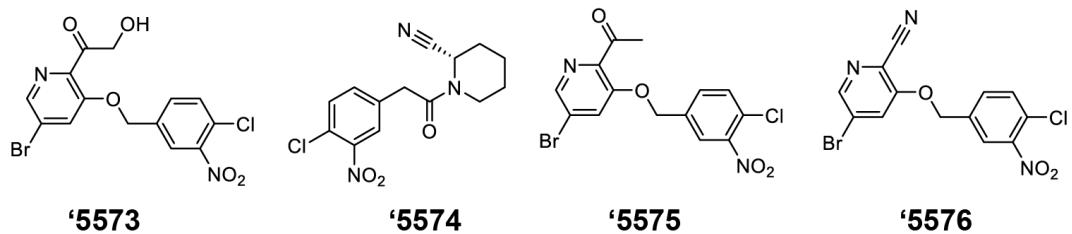
Supplementary Figure 5. Docked poses of covalent hits. (A) Aldehydes. (B) Nitriles. Covalent bonds between the warhead and Cys145 and not explicitly modeled in docking.



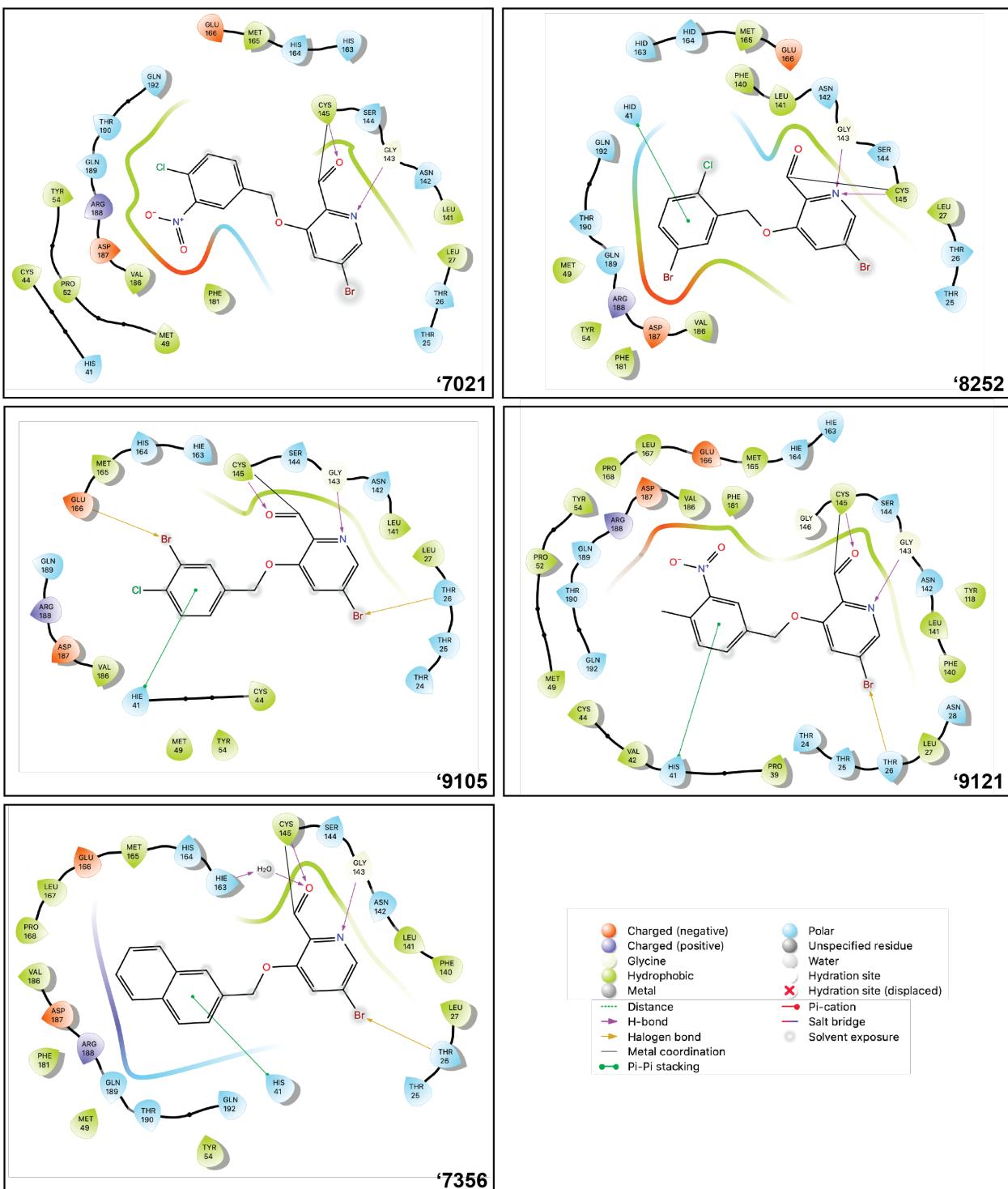
Supplementary Figure 6. Reversibility of compound '7021. Both 2X and 10X concentrations of enzyme and '7021 inhibitor were co-incubated for 1-hour. By Le Chatelier's principle, the 10X incubation should lead to more inhibited enzyme product. Both 2X and 10X incubations were diluted to 1X concentrations with final substrate concentration of 1X NSP7. Both co-incubations yielded the same velocity, evincing concentration dependent diffusion of the enzyme-inhibitor complex, thus evincing the reversibility of the '7021 compound.



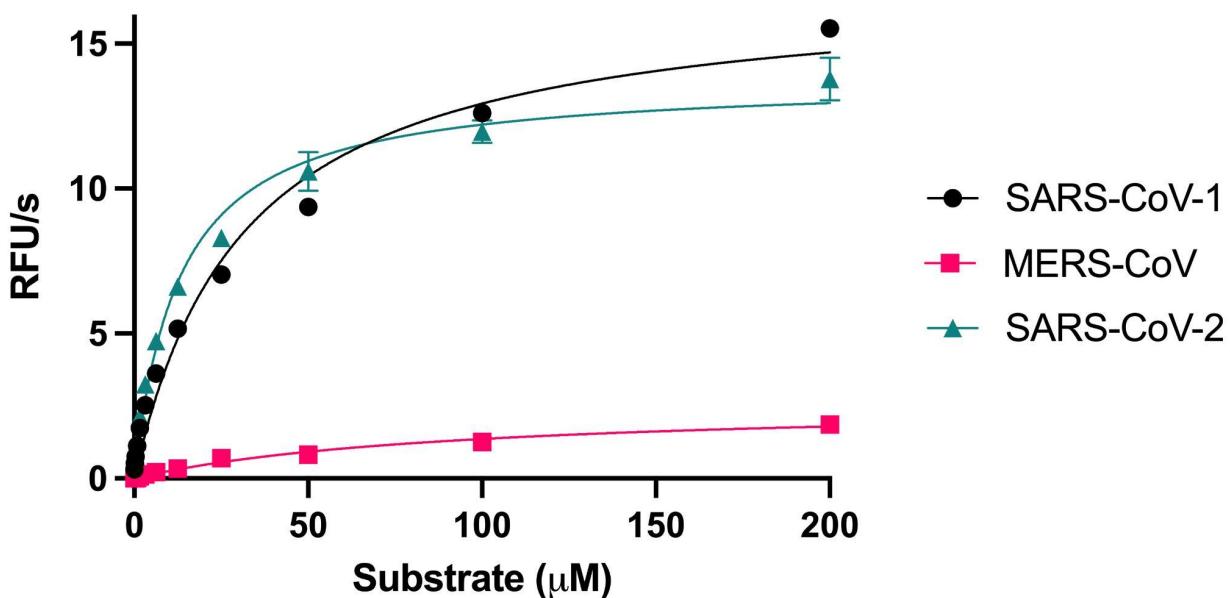
Supplementary Figure 7. '3620 analogs with improved potencies. IC₅₀ values in Table S2.

A**B**

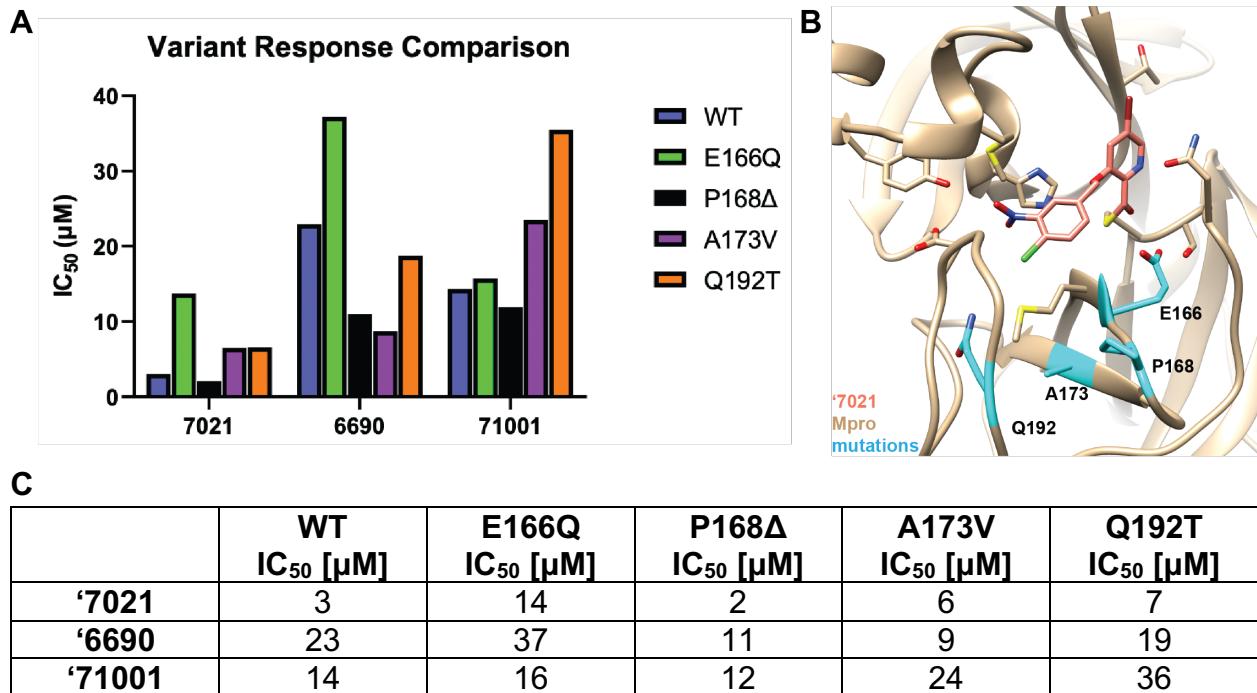
Supplementary Figure 8. '7021 analogs with different electrophiles did not inhibit M^{Pro}.



Supplementary Figure 9. LigPlot visualization of M^{Pro}-covalent inhibitor interactions in newly solved structures.



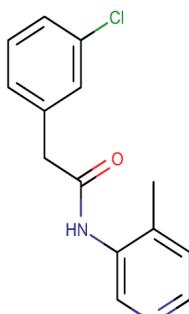
Supplementary Figure 10. Pan-viral enzymatic activities. Michaelis-Menten kinetics were ran side-by-side with the optimized NSP7 substrate for SARS-CoV-2 (green), SARS-CoV-1 (black), and MERS (red) major proteases. K_M values were found to be 12 μ M, 30 μ M, and 90 μ M for SARS-CoV-2, SARS-CoV-1, and MERS, respectively. All proceeding inhibitory assays were ran with K_M concentrations of substrate.



Supplementary Figure 11. Compound activities against mutant SARS-CoV-2 M^{Pro}.
(A, C) IC₅₀ values for '7021, '6690, and '71001 against a panel of M^{Pro} mutants. **(B)** Mutations (blue carbons) shown on the '7021 SARS-CoV-2 M^{Pro} crystal structure. WT, wildtype. All measurements were done in triplicate.

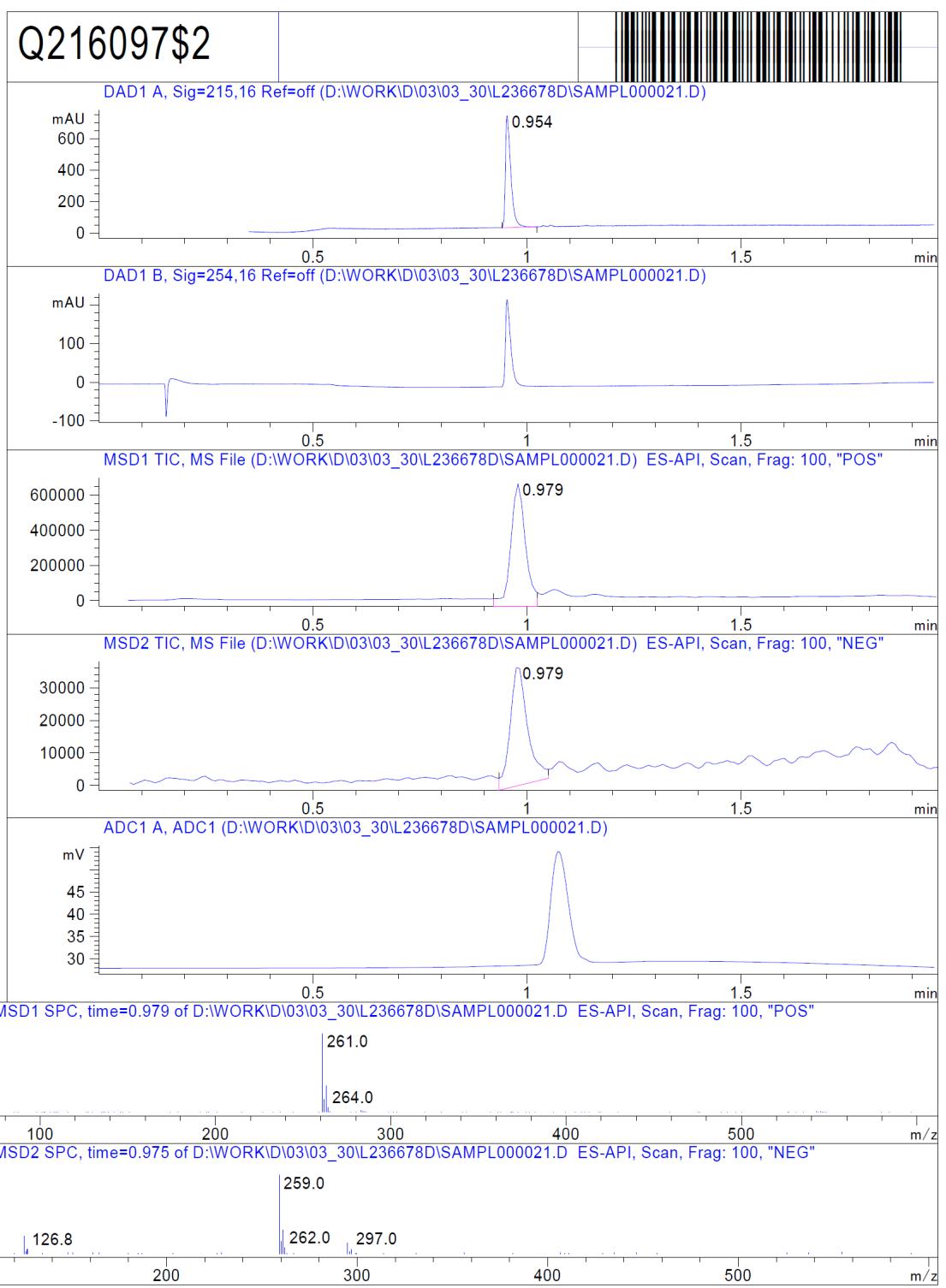
Supplementary Figure 12. Compound analytical data.

MaxPeak: 100.00%
Ret_Time: 0.954 min



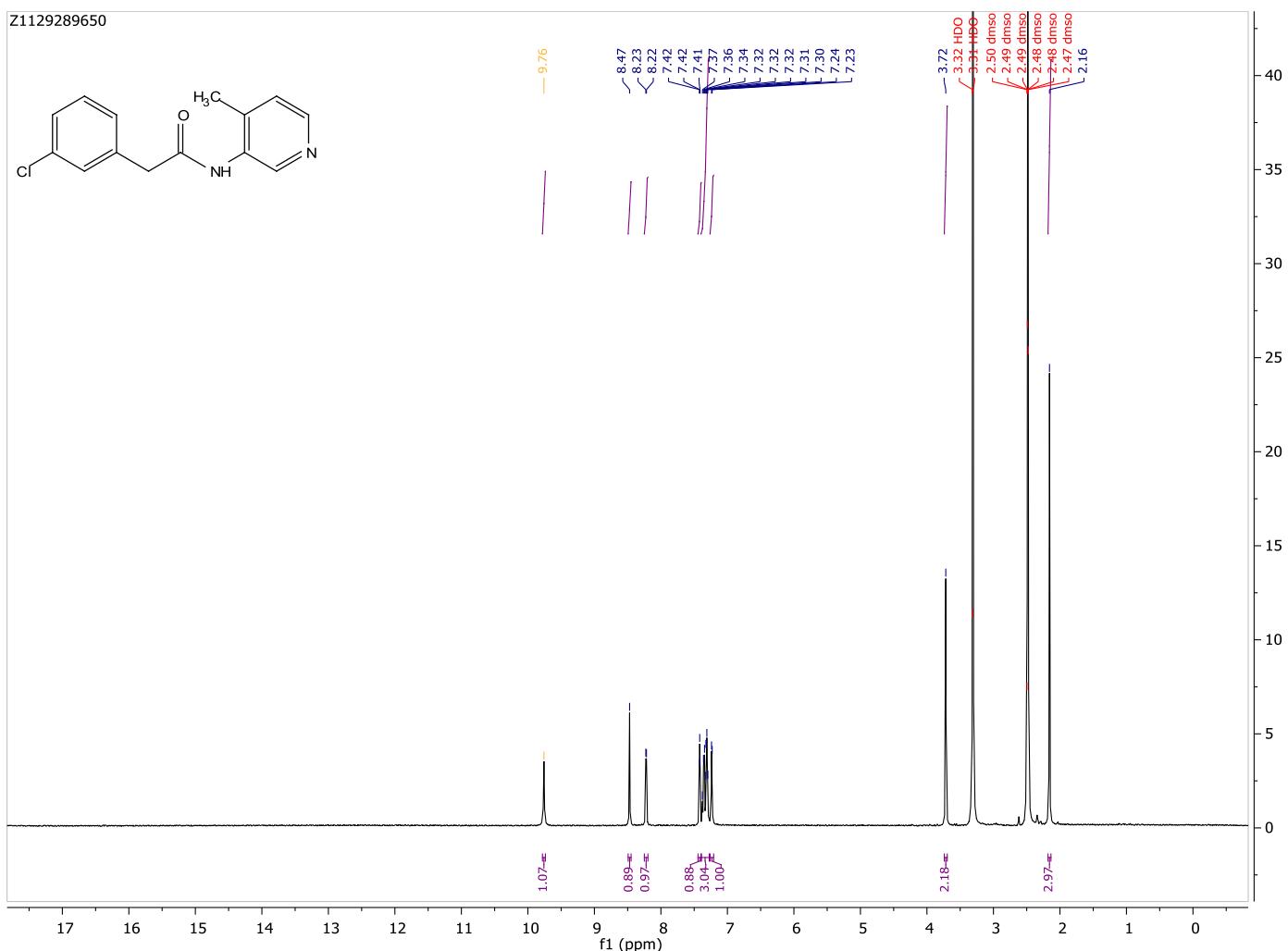
Mol Wt 260.72
Exact Mass 260.09
Time Area%

1 0.954 100.00

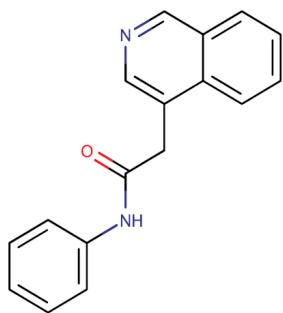


Z1129289650

Z1129289650

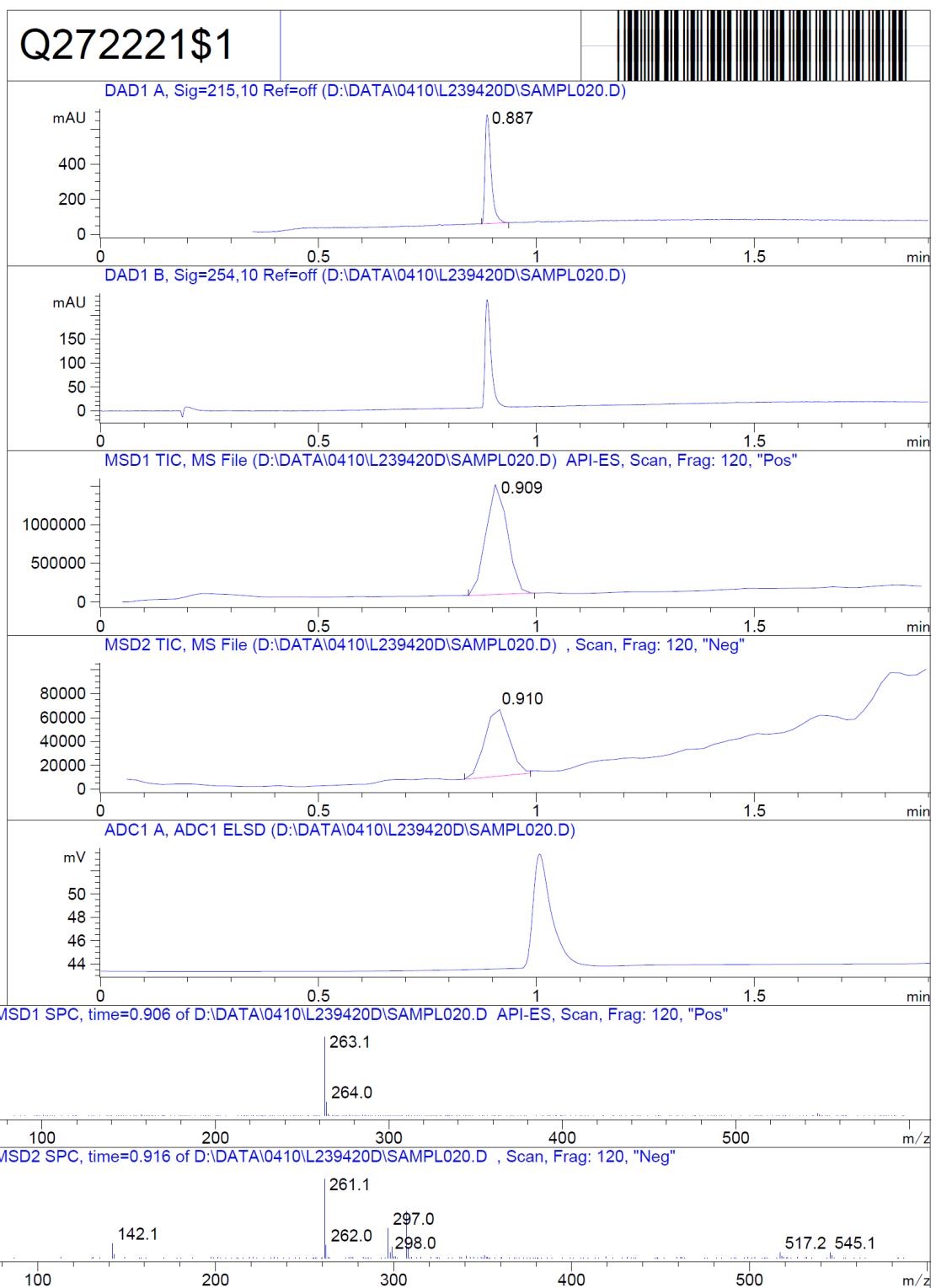


MaxPeak: 100.00%
Ret_Time: 0.887 min



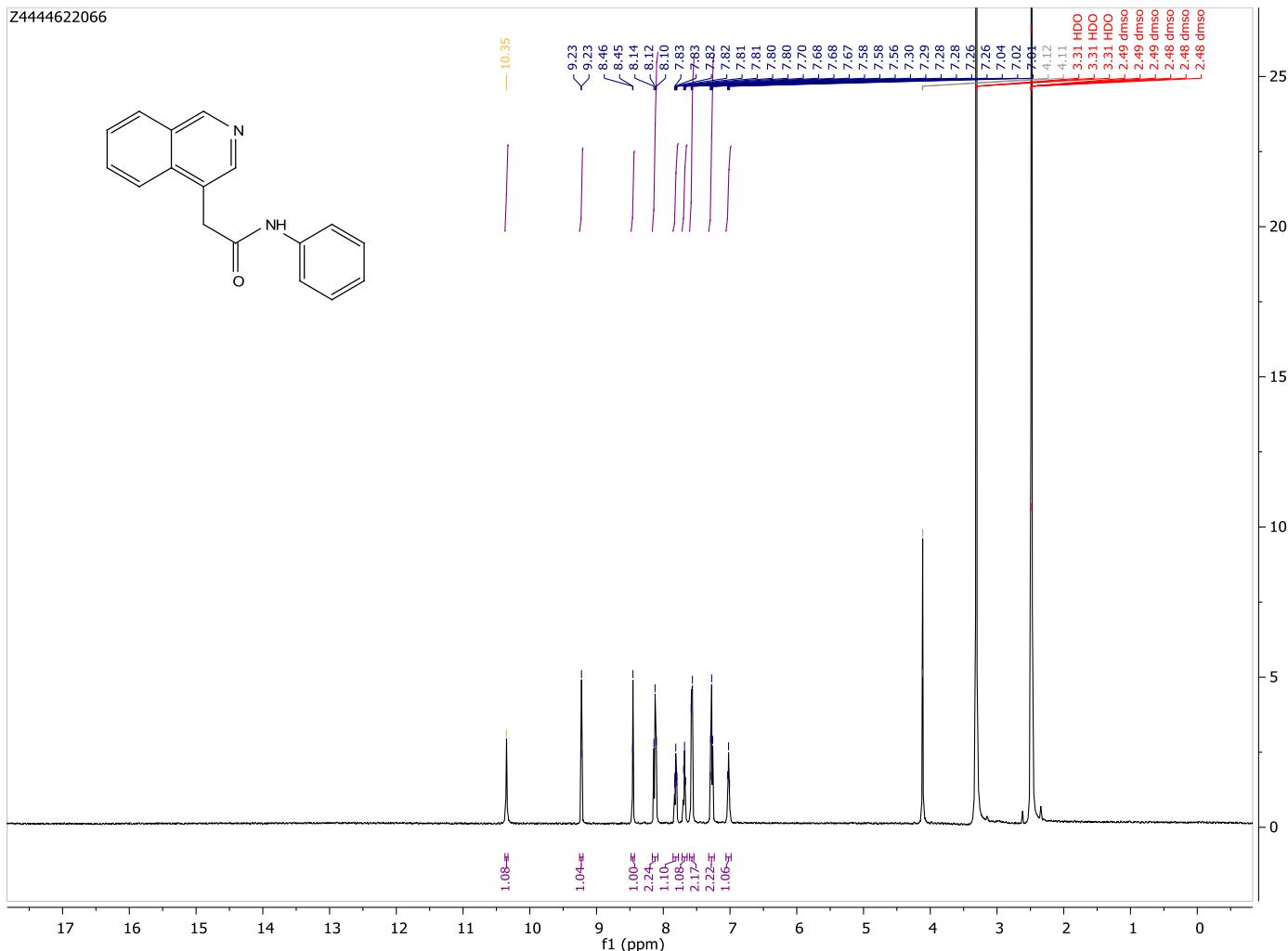
Mol Wt 262.31
Exact Mass 262.13
Time Area%

1 0.887 100.00

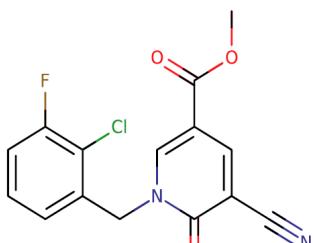


Z4444622066

Z444622066

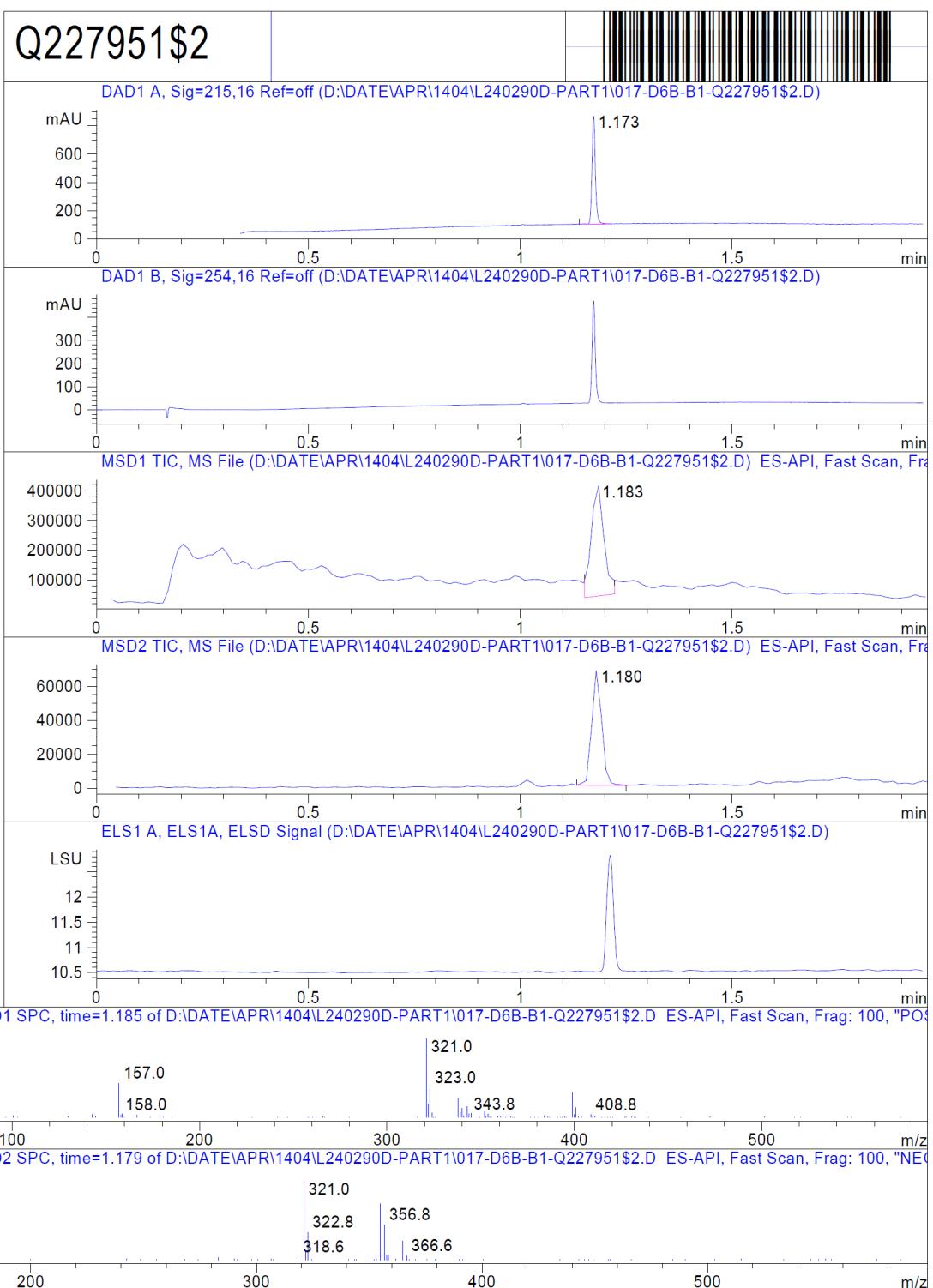


MaxPeak: 100.00%
Ret_Time: 1.173 min



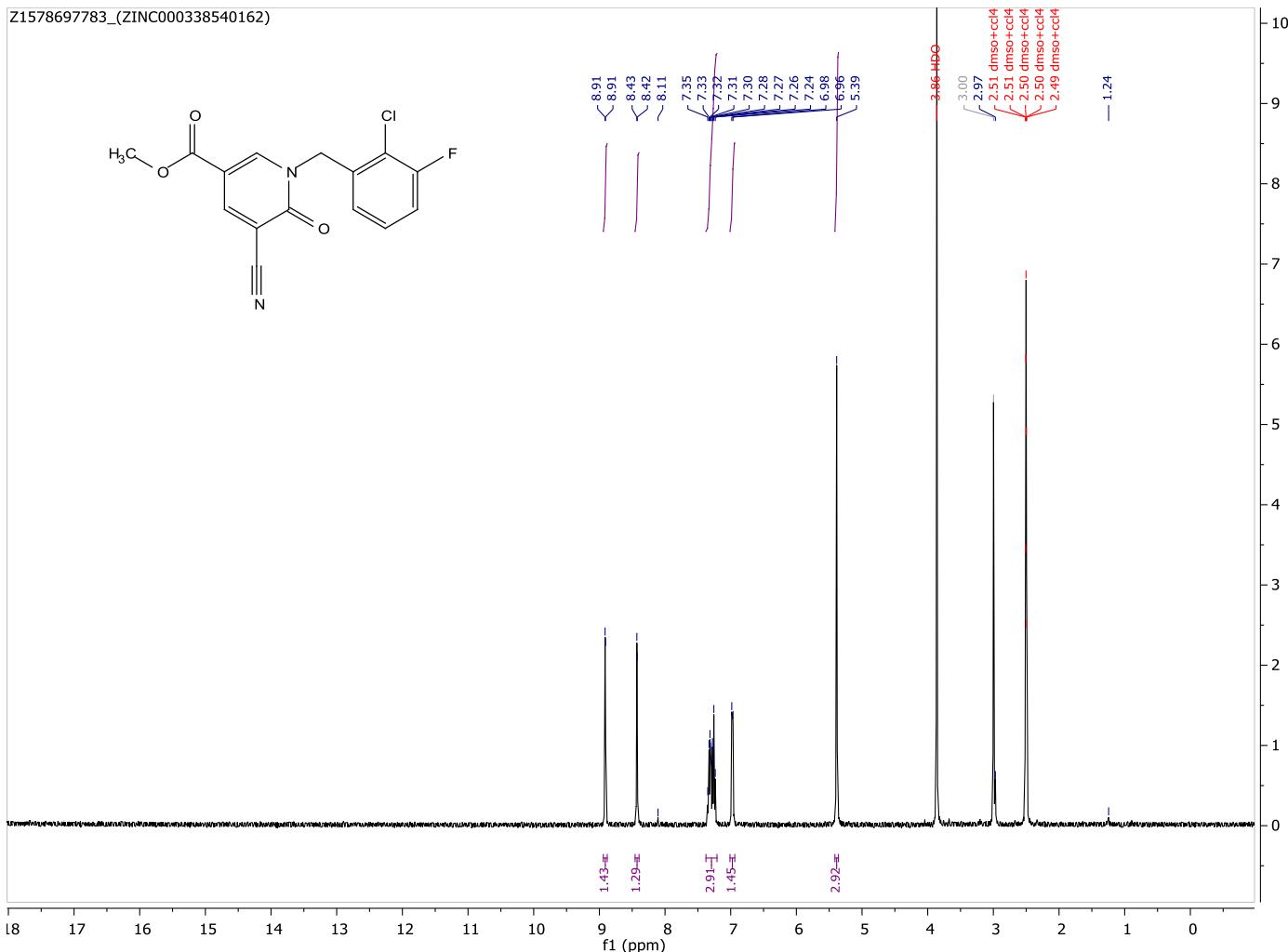
Mol Wt 320.7
Exact Mass 320.04
Time Area%

1 1.173 100.00

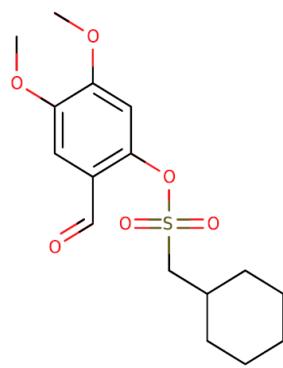


Z1578697783_(ZINC000338540162)

Z1578697783_(ZINC000338540162)

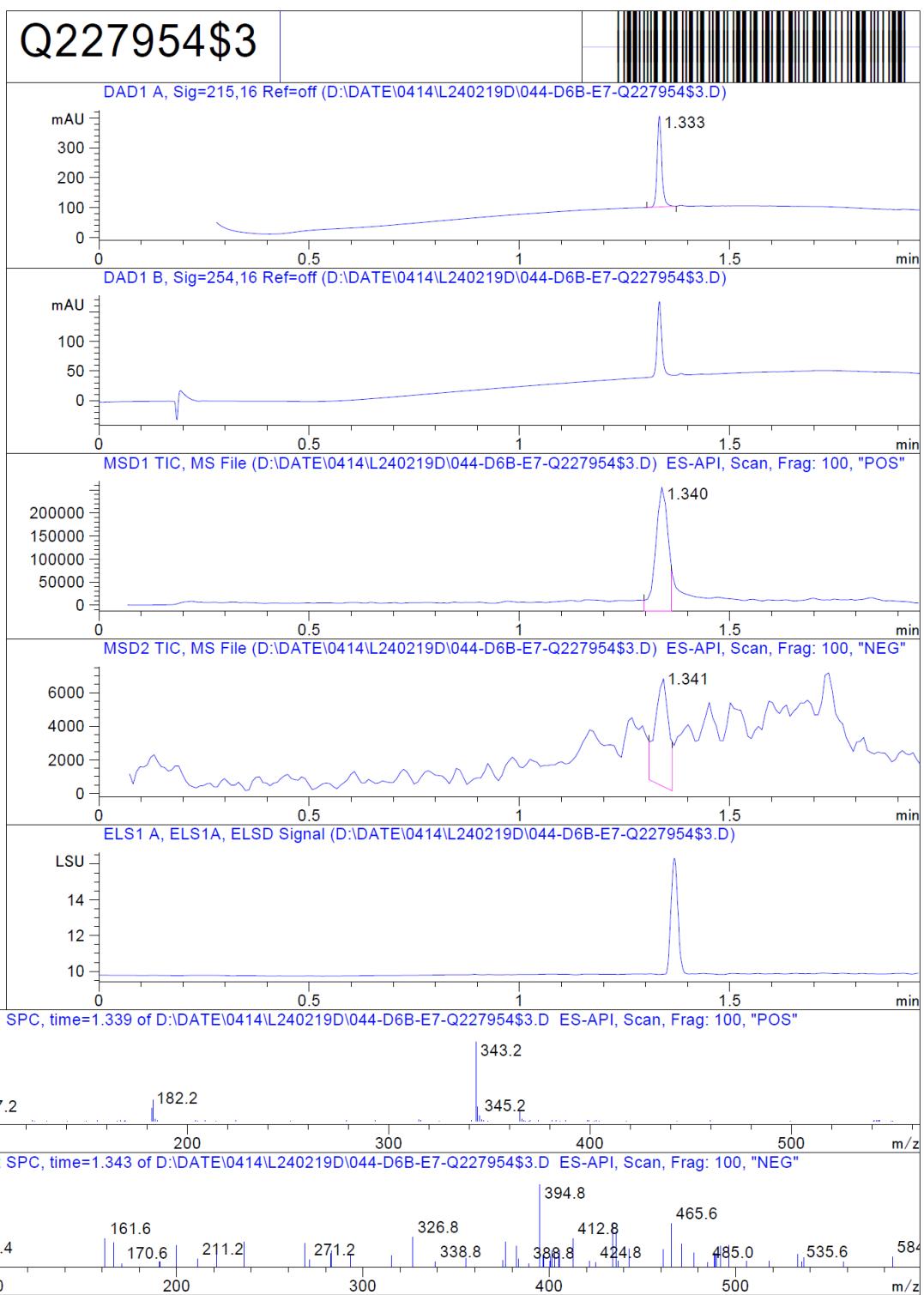


MaxPeak: 100.00%
Ret_Time: 1.333 min



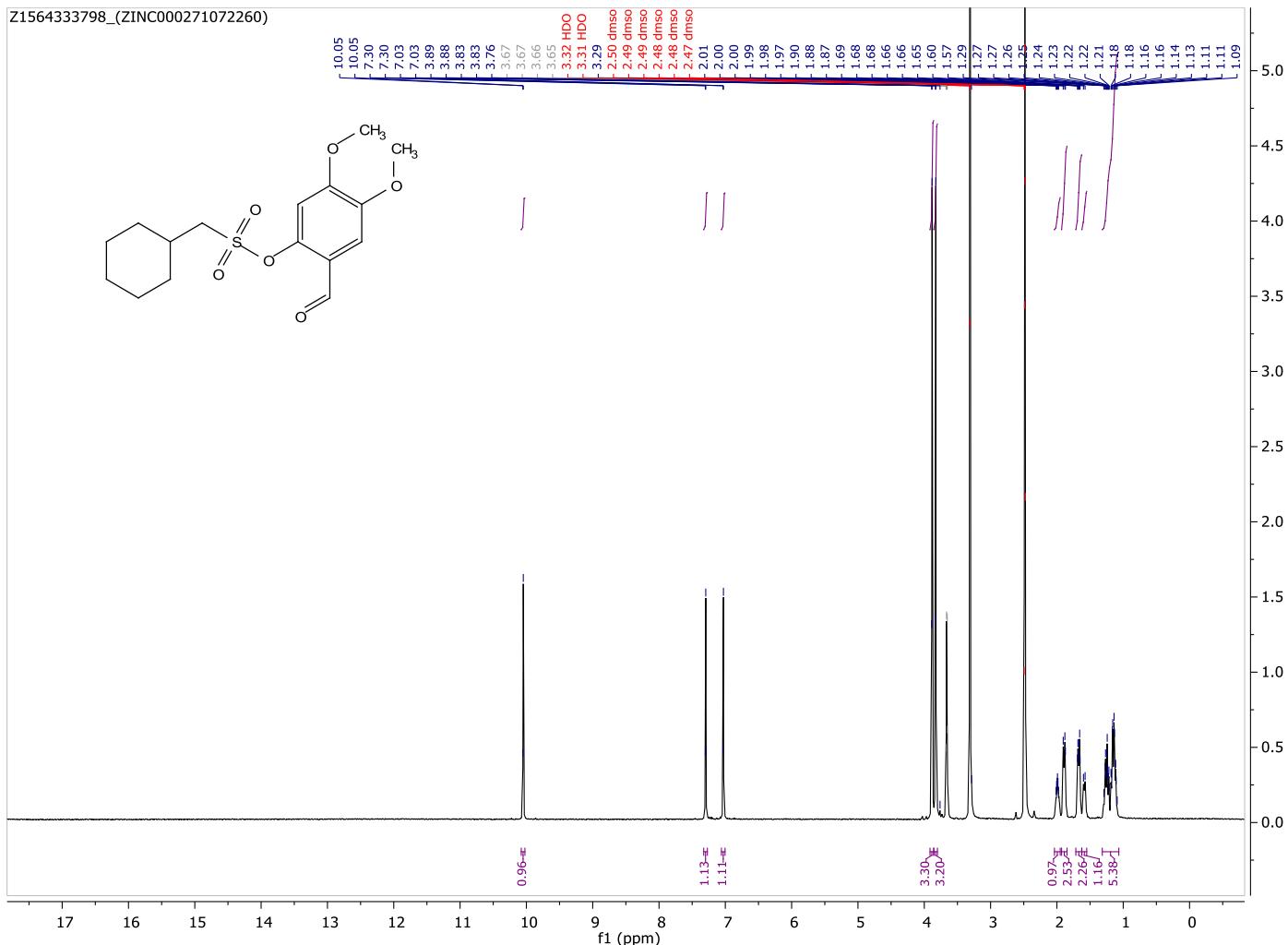
Mol Wt 342.41
Exact Mass 342.13
Time Area %

1 1.333 100.00

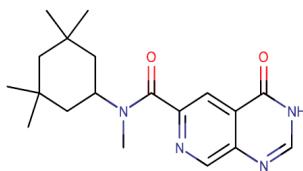


Z1564333798_(ZINC000271072260)

Z1564333798_(ZINC000271072260)

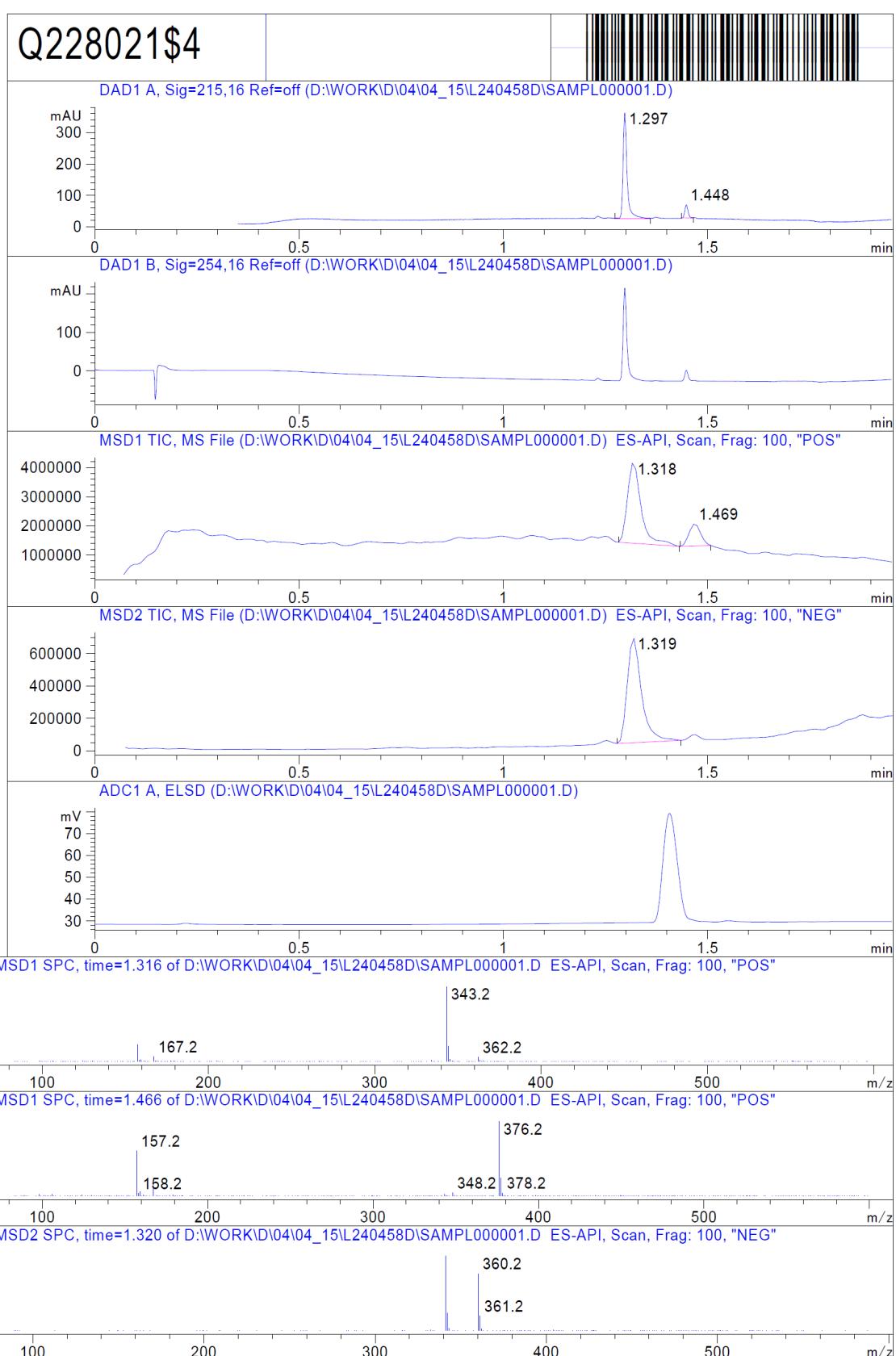


MaxPeak: 91.00%
Ret_Time: 1.297 min



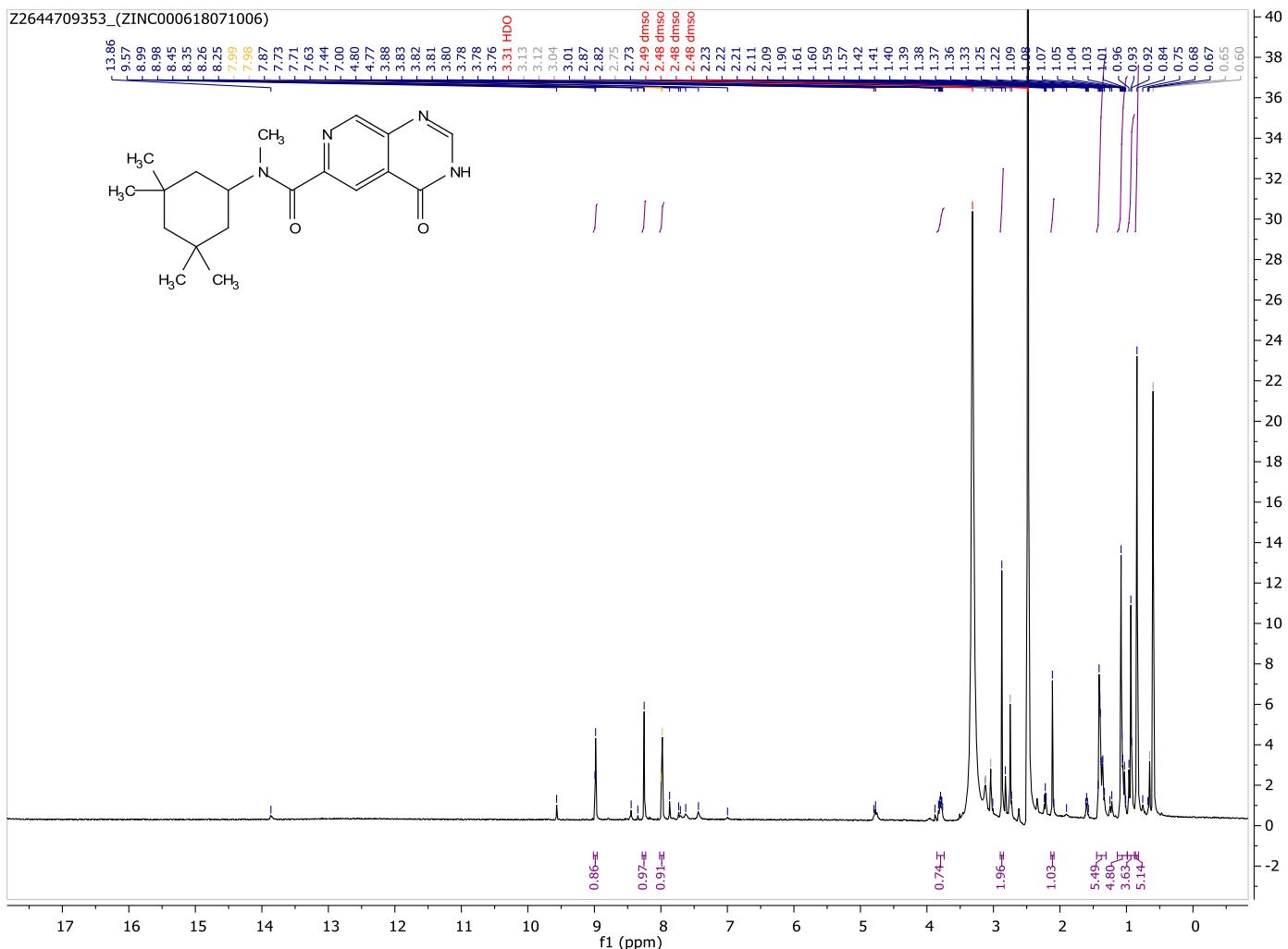
Mol Wt 342.44
Exact Mass 342.24

#	Time	Area%
1	1.297	91.00
2	1.448	9.00

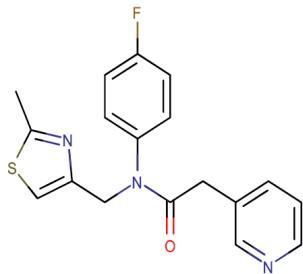


Z2644709353_(ZINC000618071006)

Z2644709353_(ZINC000618071006)

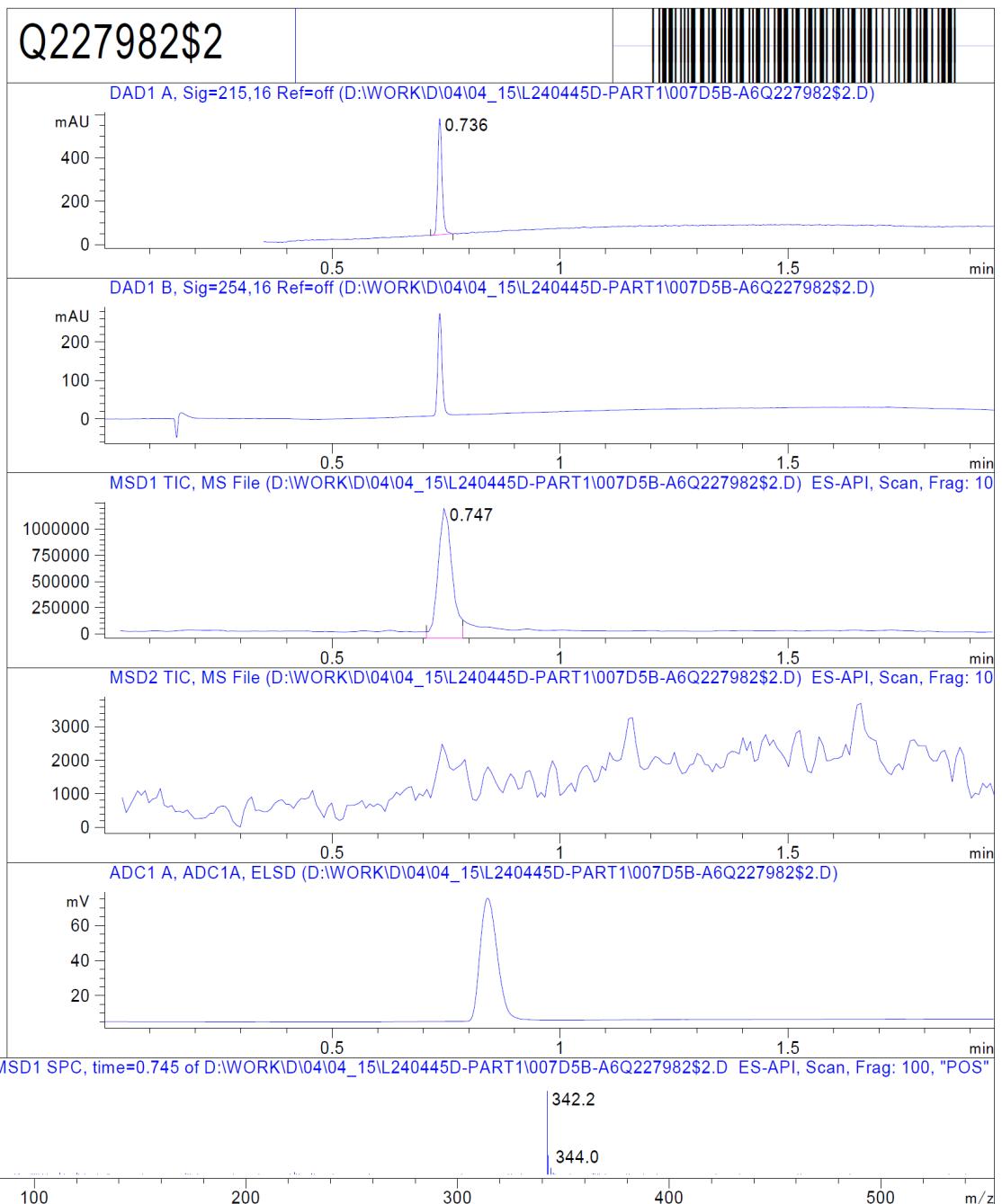


MaxPeak: 100.00%
Ret_Time: 0.736 min



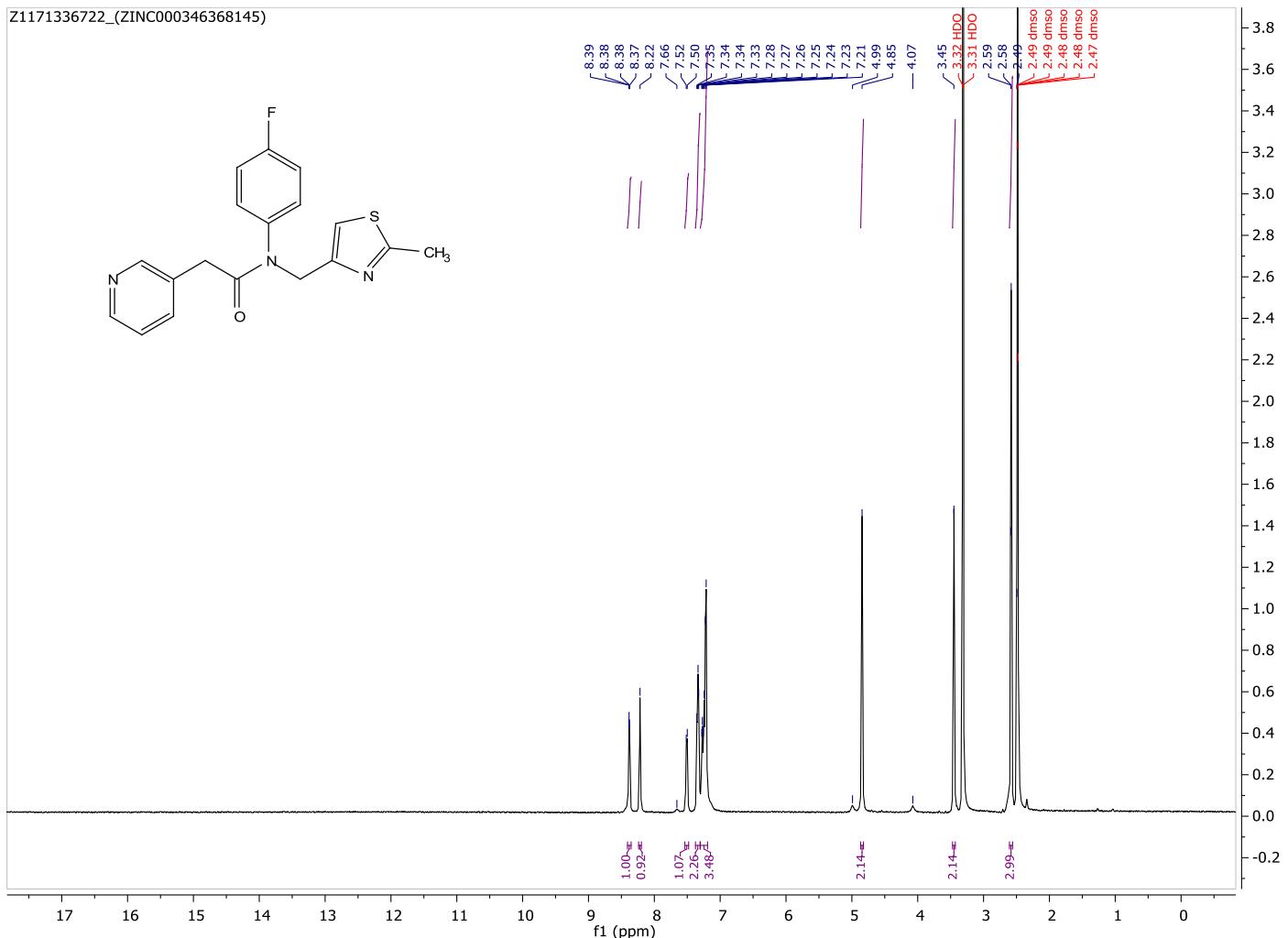
Mol Wt 341.4
Exact Mass 341.12
Time Area%

1 0.736 100.00

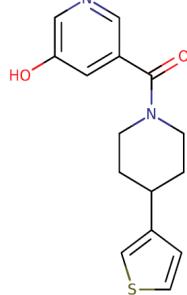


Z1171336722_(ZINC000346368145)

Z1171336722_(ZINC000346368145)

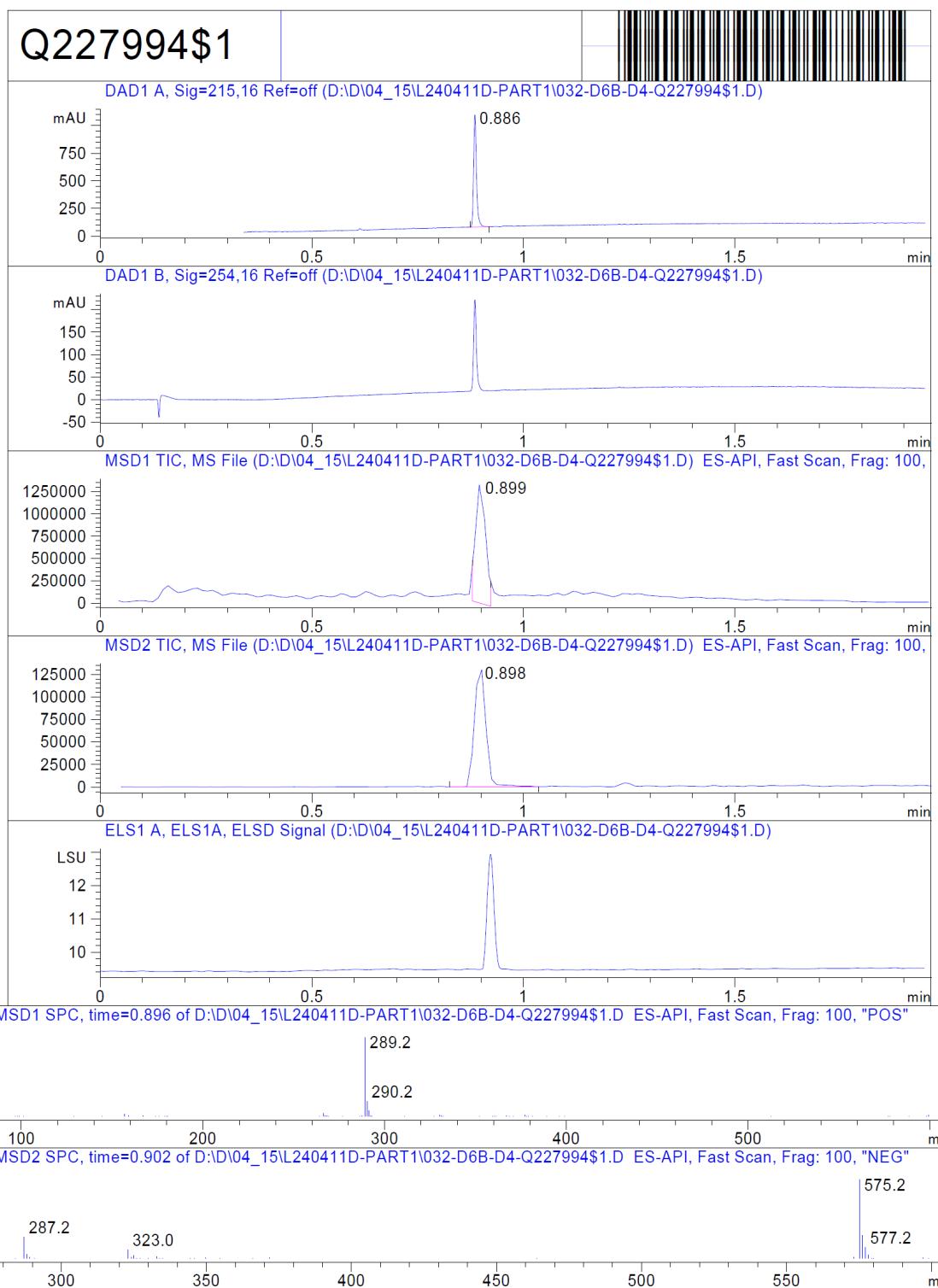


MaxPeak: 100.00%
Ret_Time: 0.886 min



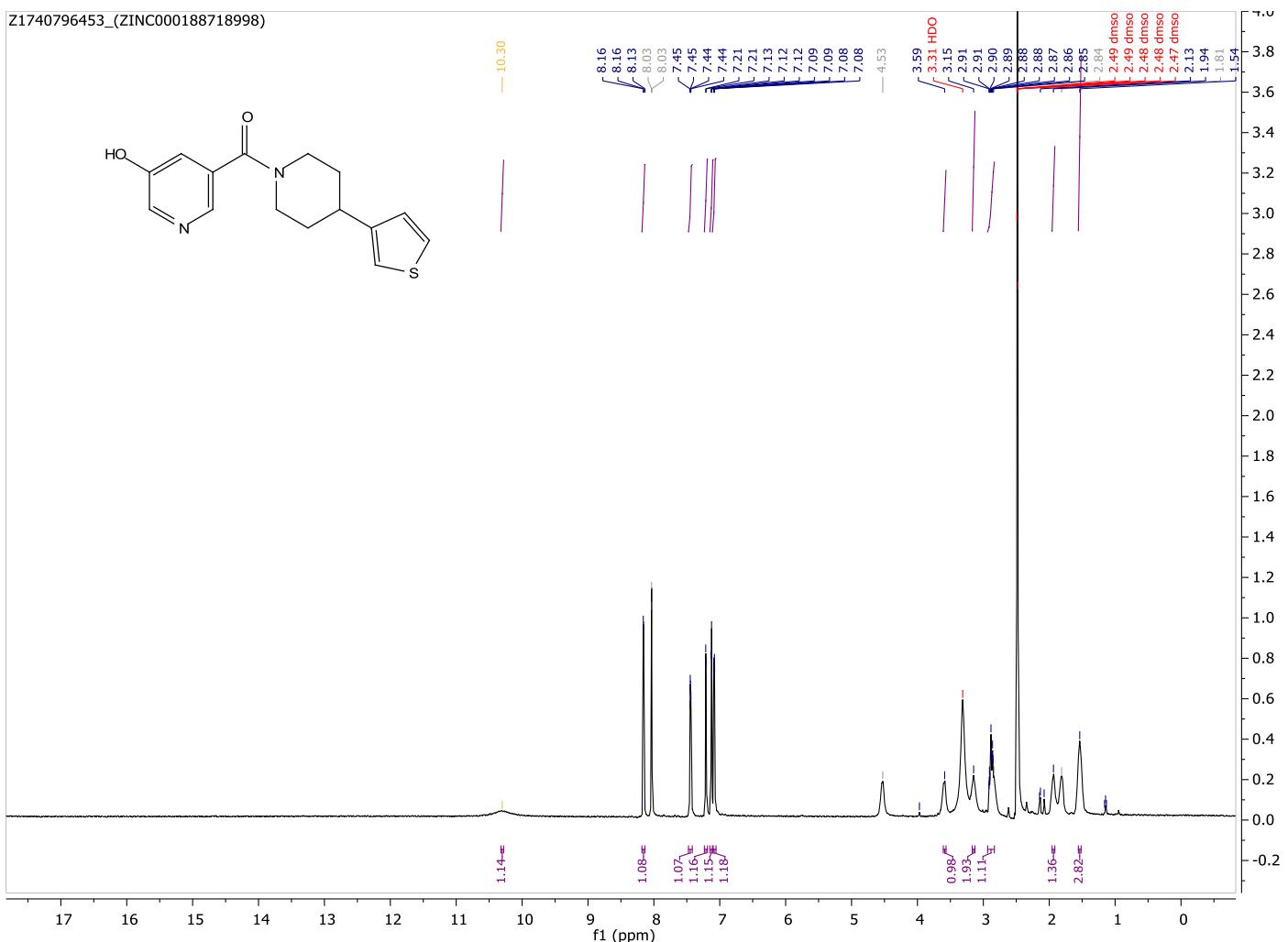
Mol Wt 288.36
Exact Mass 288.11
Time Area%

1 0.886 100.00

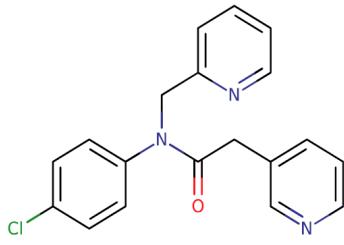


Z1740796453_(ZINC000188718998)

Z1740796453_(ZINC000188718998)

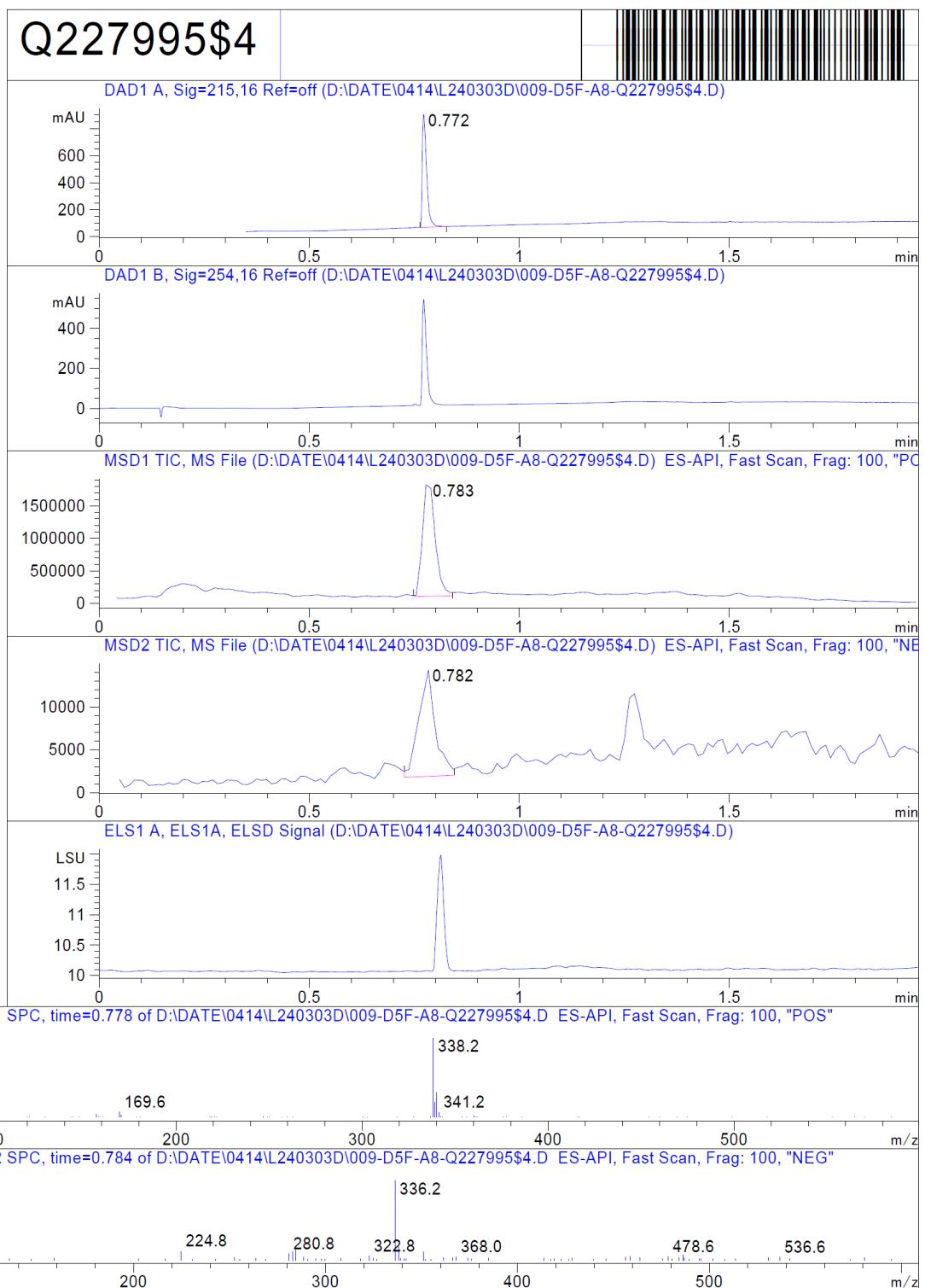


MaxPeak: 100.00%
Ret_Time: 0.772 min



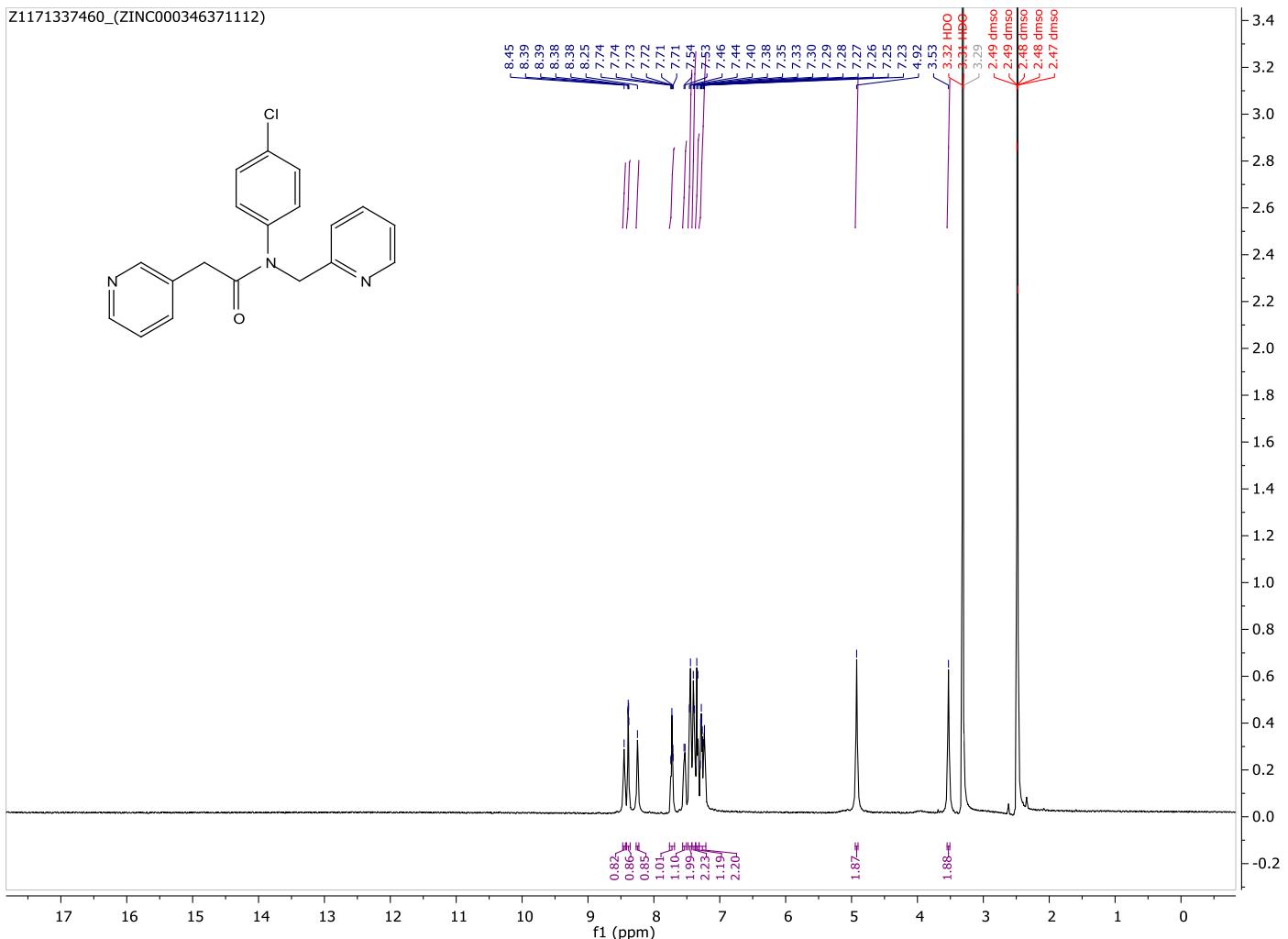
Mol Wt 337.8
Exact Mass 337.12
Time Area%

1 0.772 100.00

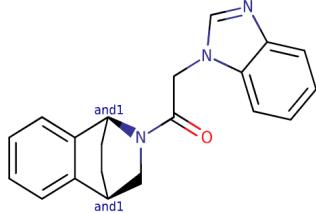


Z1171337460_(ZINC000346371112)

Z1171337460_(ZINC000346371112)

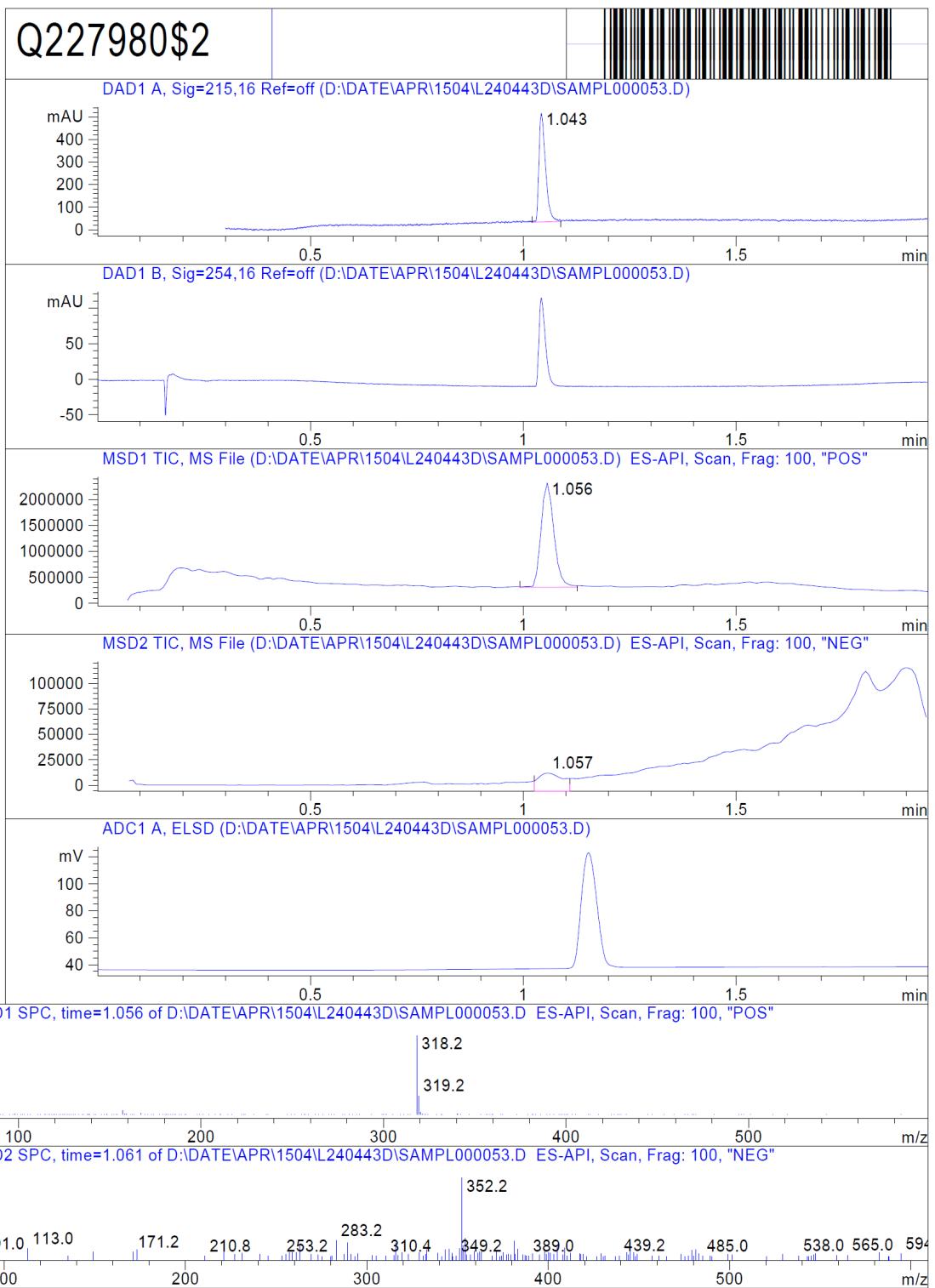


MaxPeak: 100.00%
Ret_Time: 1.043 min



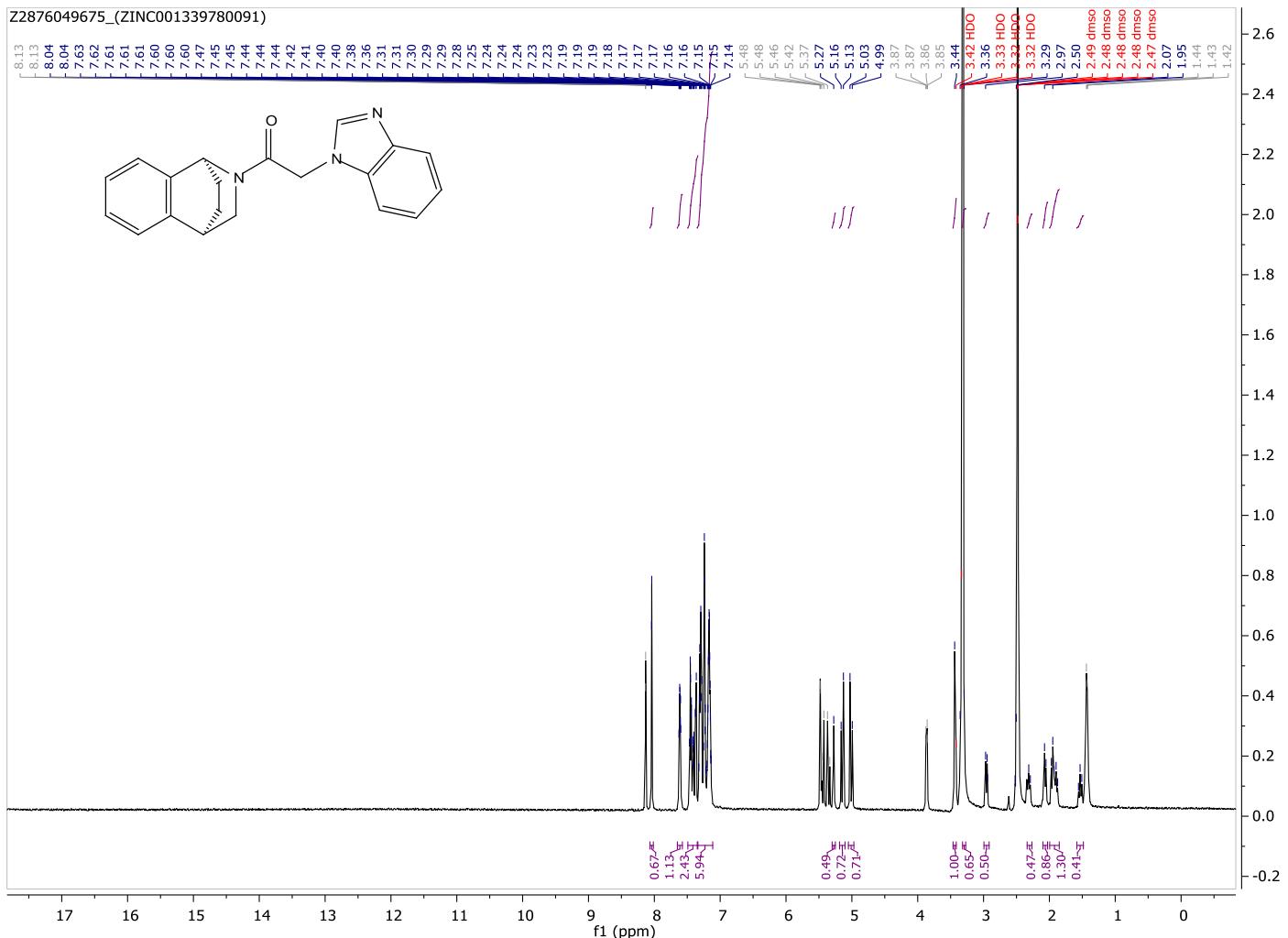
Mol Wt 317.38
Exact Mass 317.18
Time Area%

1 1.043 100.00

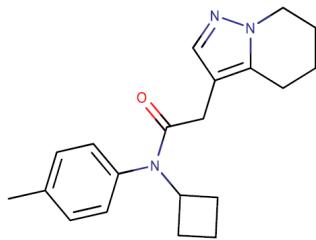


Z22876049675_(ZINC001339780091)

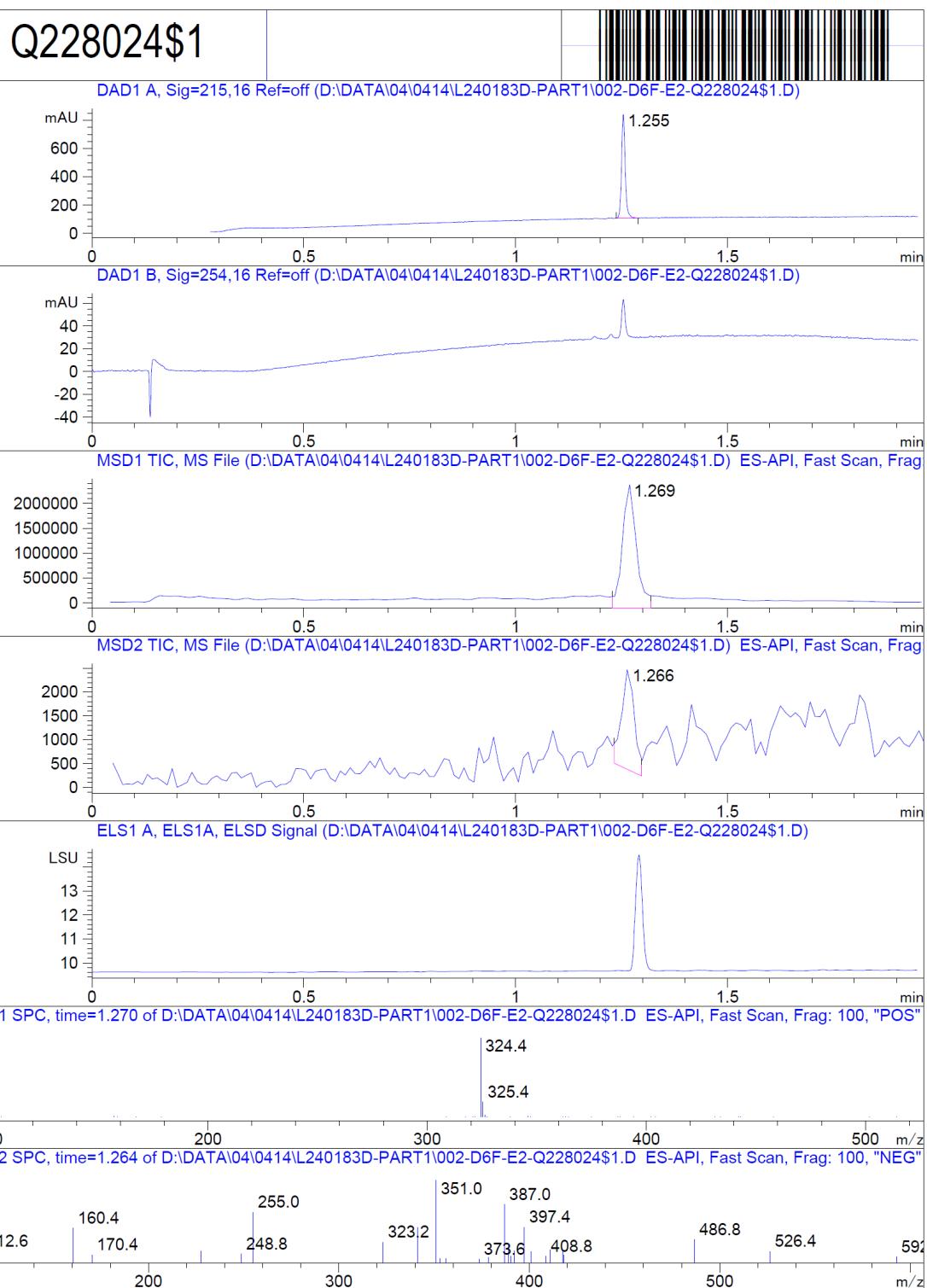
Z2876049675_(ZINC001339780091)



MaxPeak: 100.00%
Ret_Time: 1.255 min

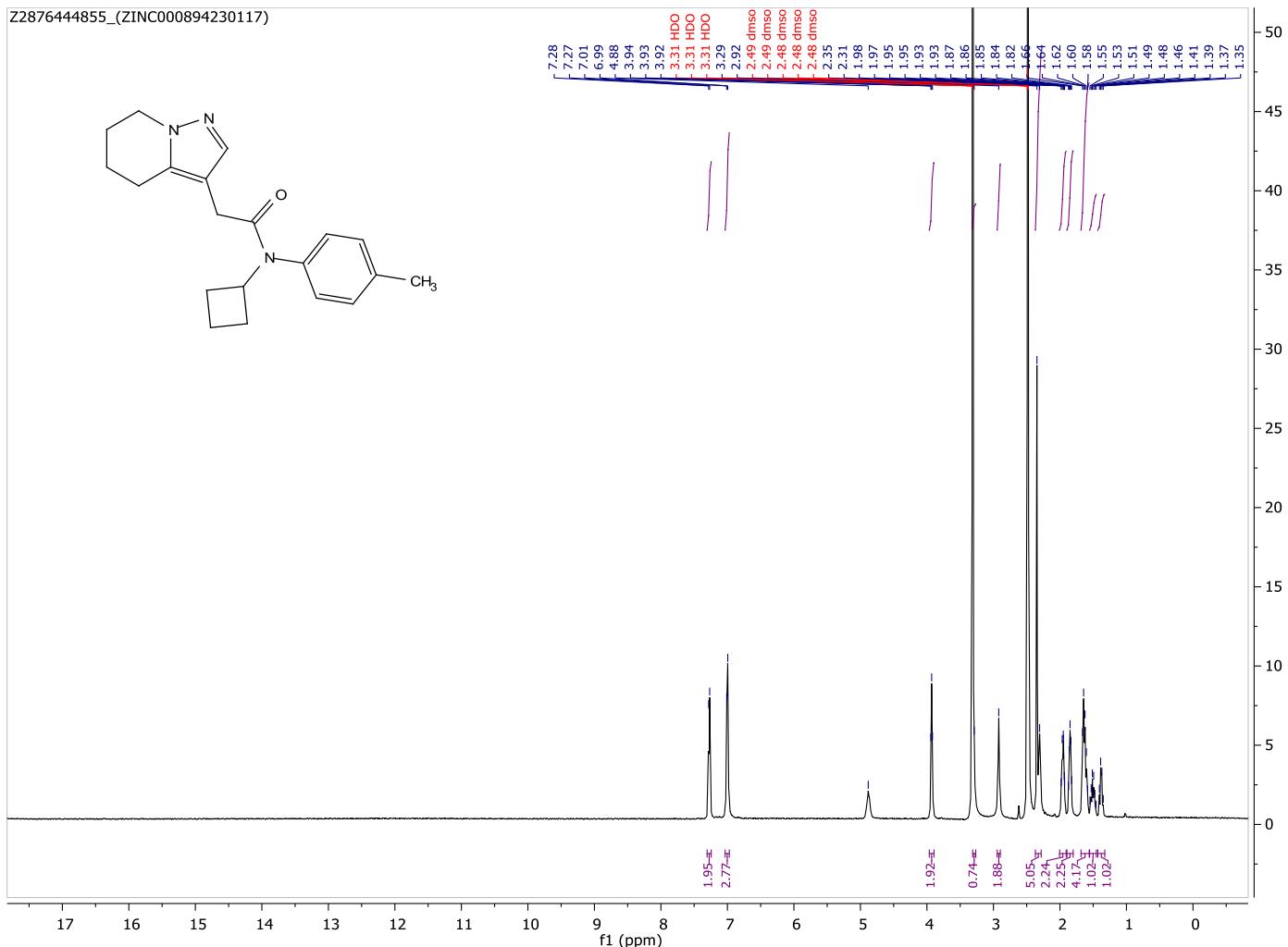


Mol Wt 323.43
Exact Mass 323.24
Time Area%
1 1.255 100.00

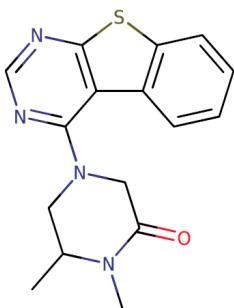


Z2876444855_(ZINC000894230117)

Z2876444855_(ZINC000894230117)

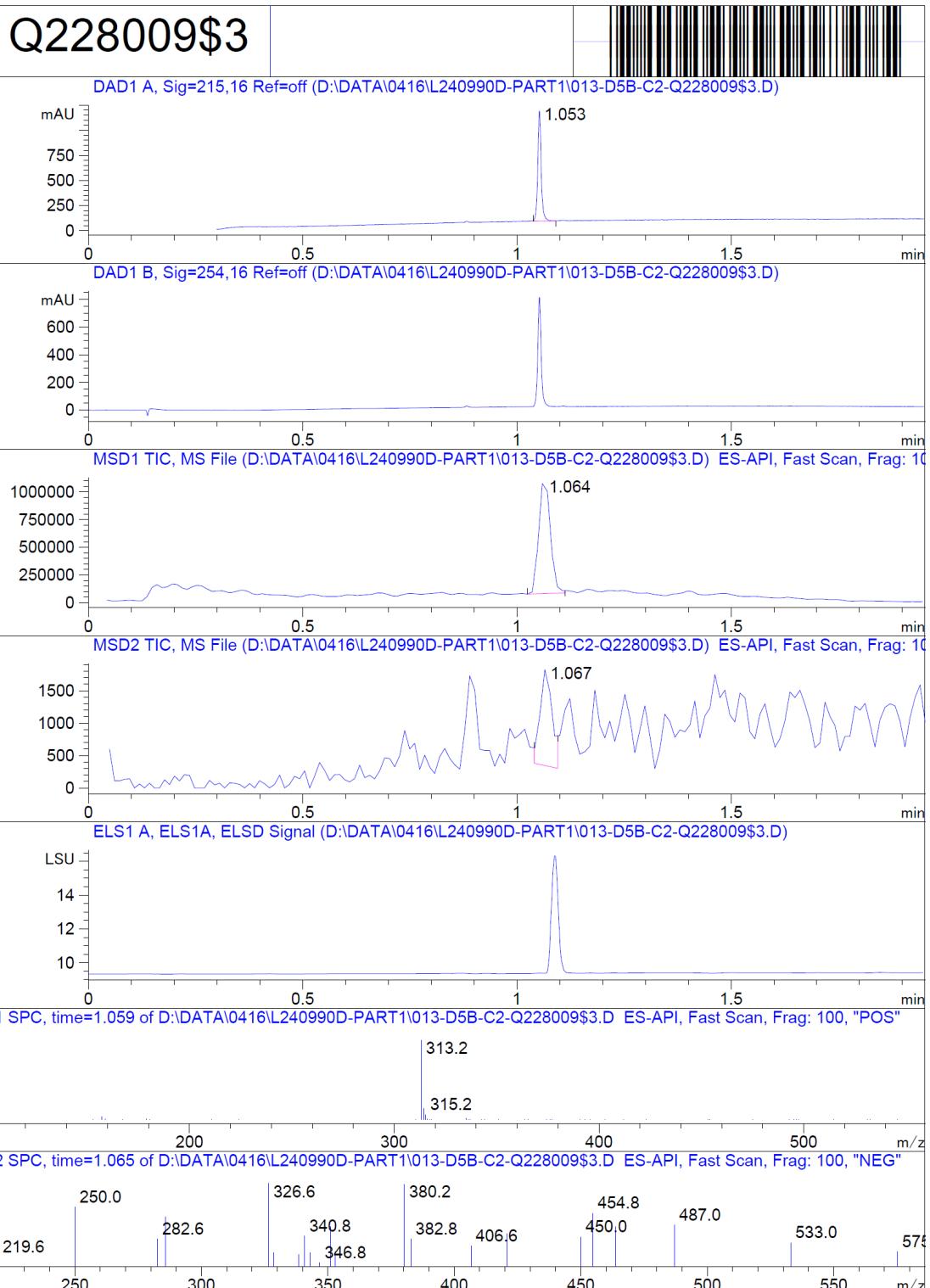


MaxPeak: 100.00%
Ret_Time: 1.053 min



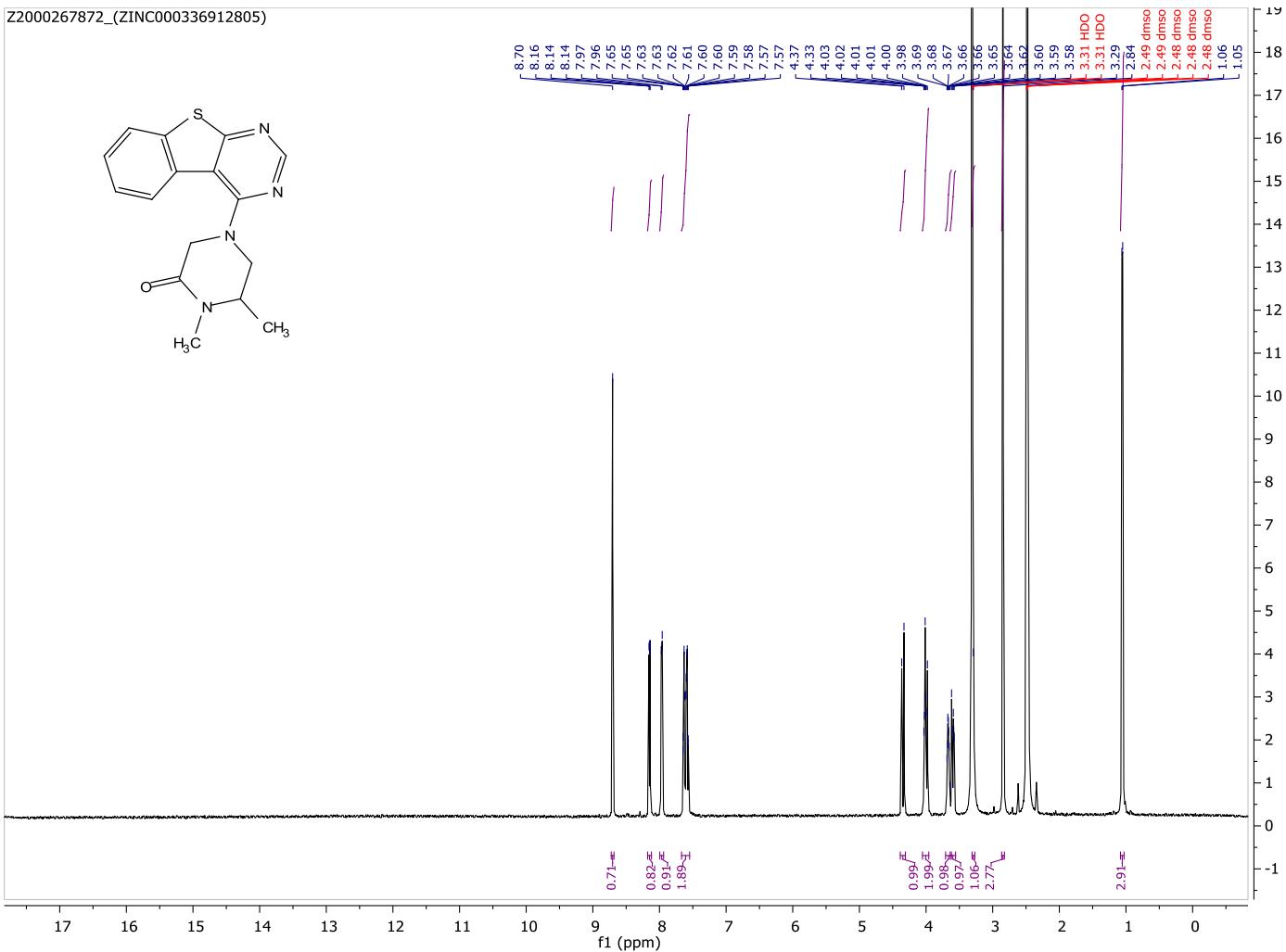
Mol Wt 312.39
Exact Mass 312.12
Time Area%

1 1.053 100.00

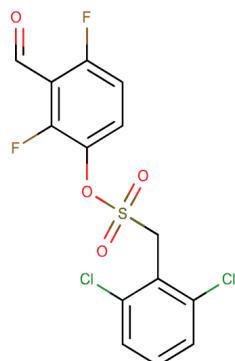


Z2000267872_(ZINC000336912805)

Z2000267872_(ZINC000336912805)

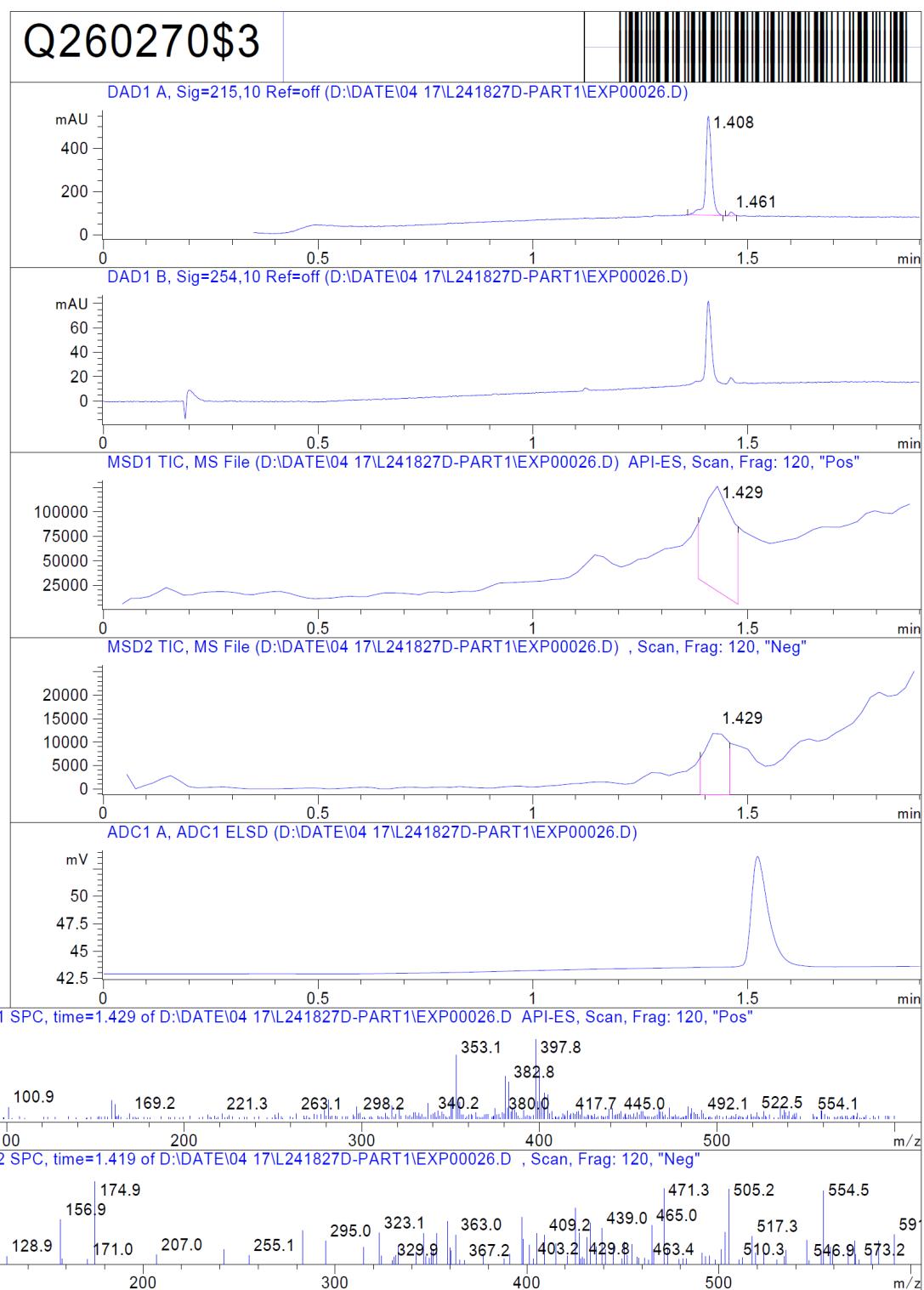


MaxPeak: 97.45%
Ret_Time: 1.408 min



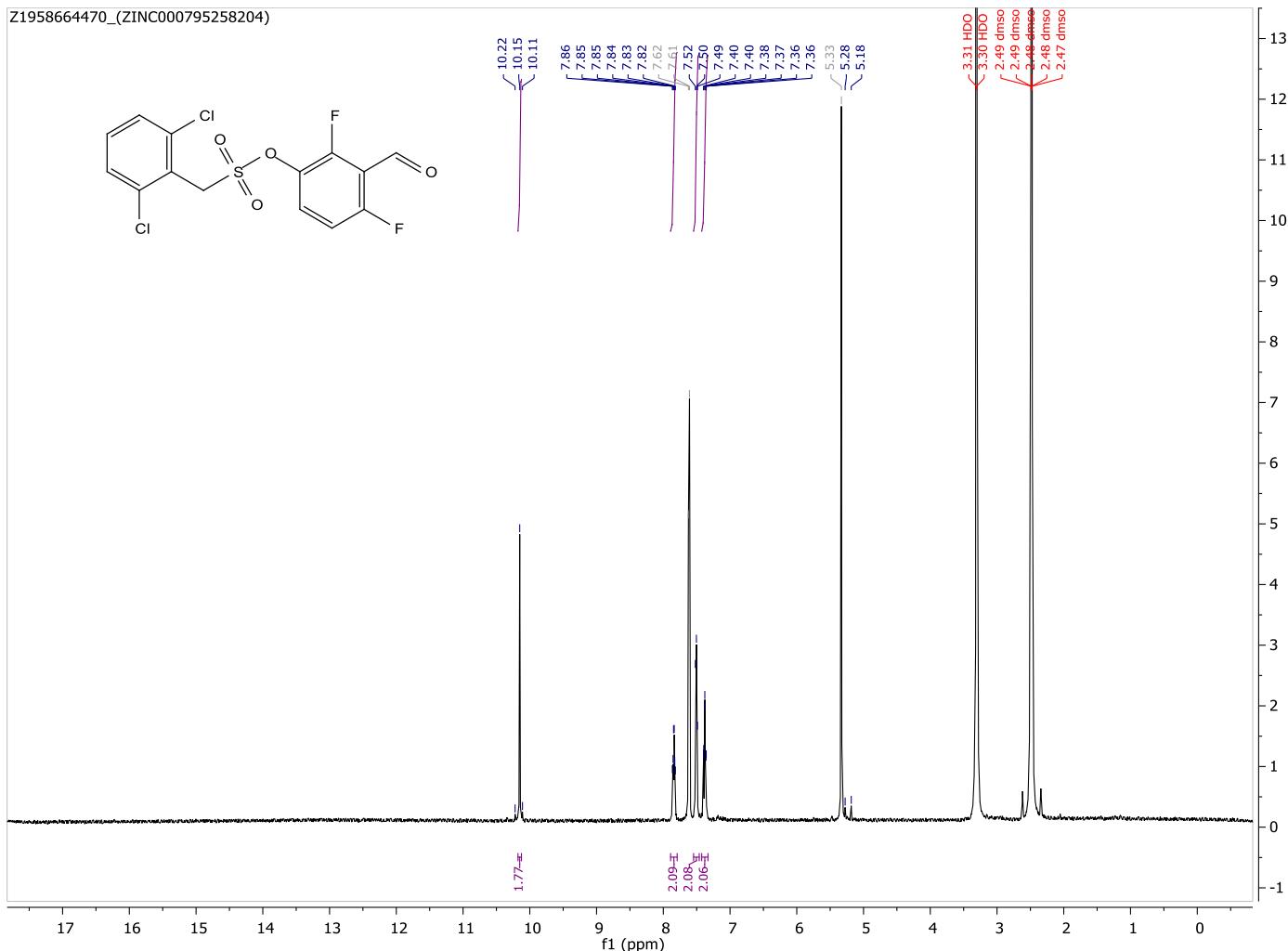
Mol Wt 381.18
Exact Mass 379.95

#	Time	Area%
1	1.408	97.45
2	1.461	2.55



Z1958664470_(ZINC000795258204)

Z1958664470_(ZINC000795258204)

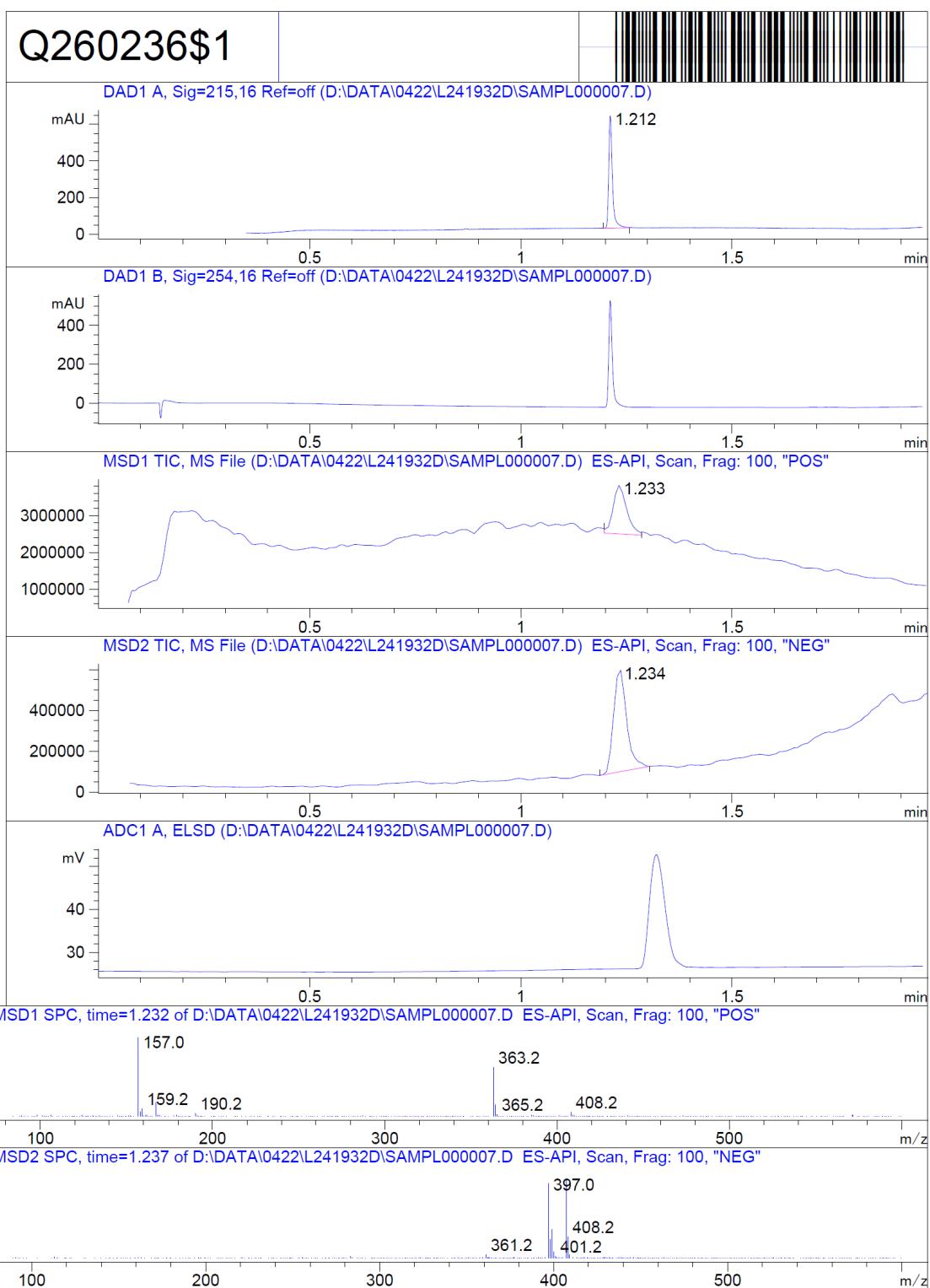


MaxPeak: 100.00%
Ret_Time: 1.212 min



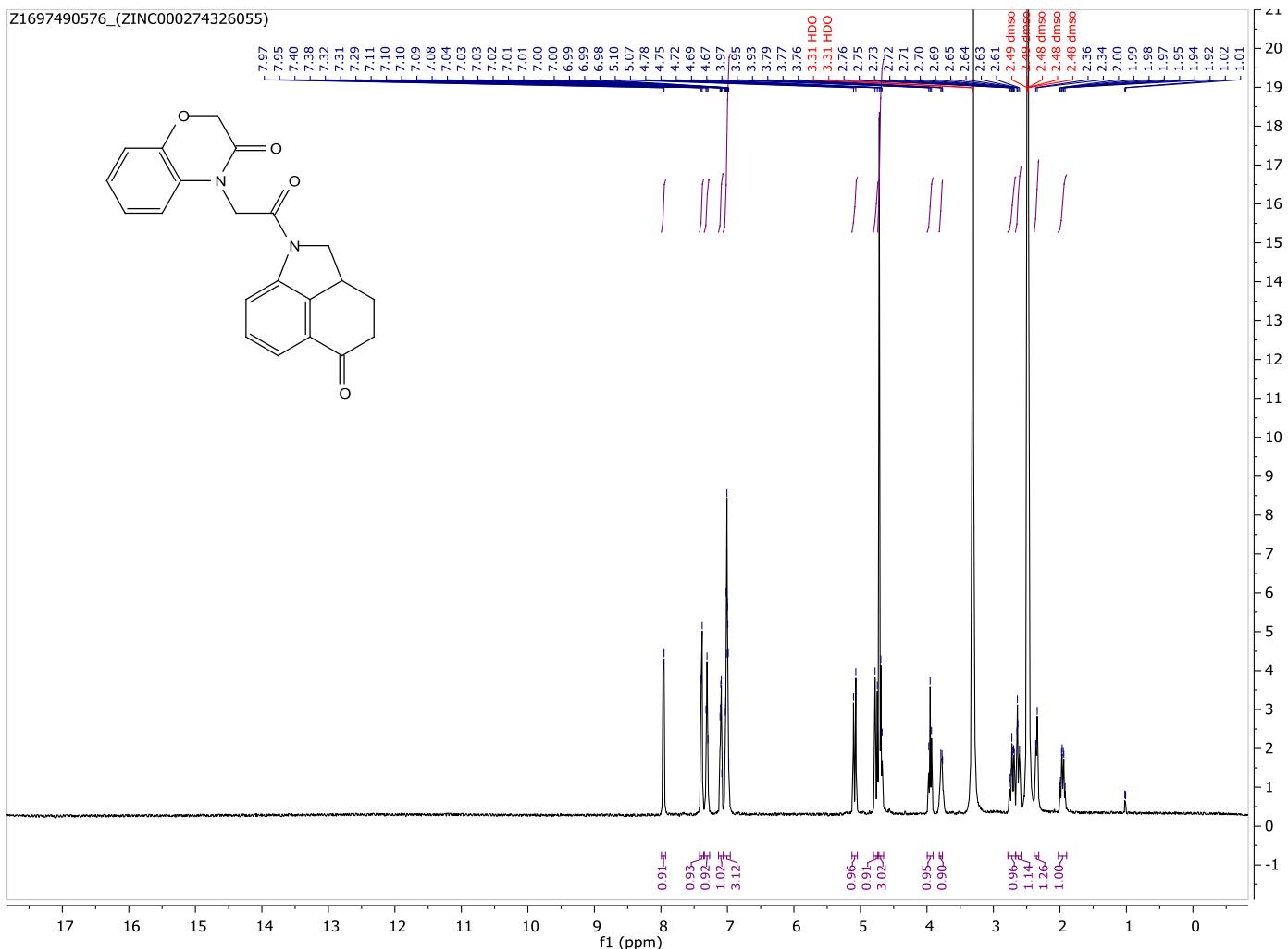
Mol Wt 362.38
Exact Mass 362.14
Time Area%

1 1.212 100.00

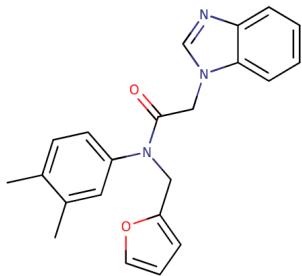


Z1697490576_(ZINC000274326055)

Z1697490576_(ZINC000274326055)

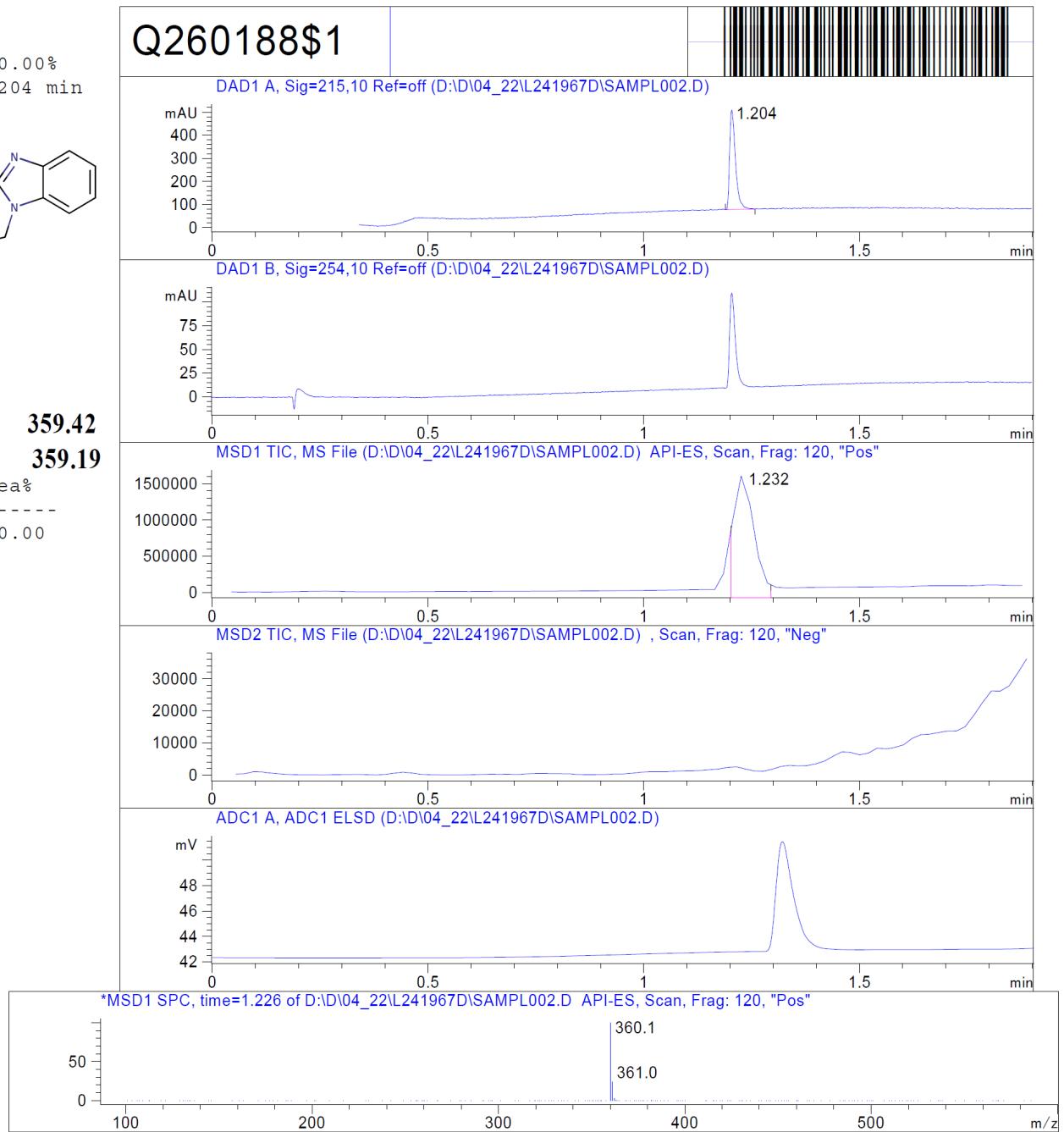


MaxPeak: 100.00%
Ret_Time: 1.204 min



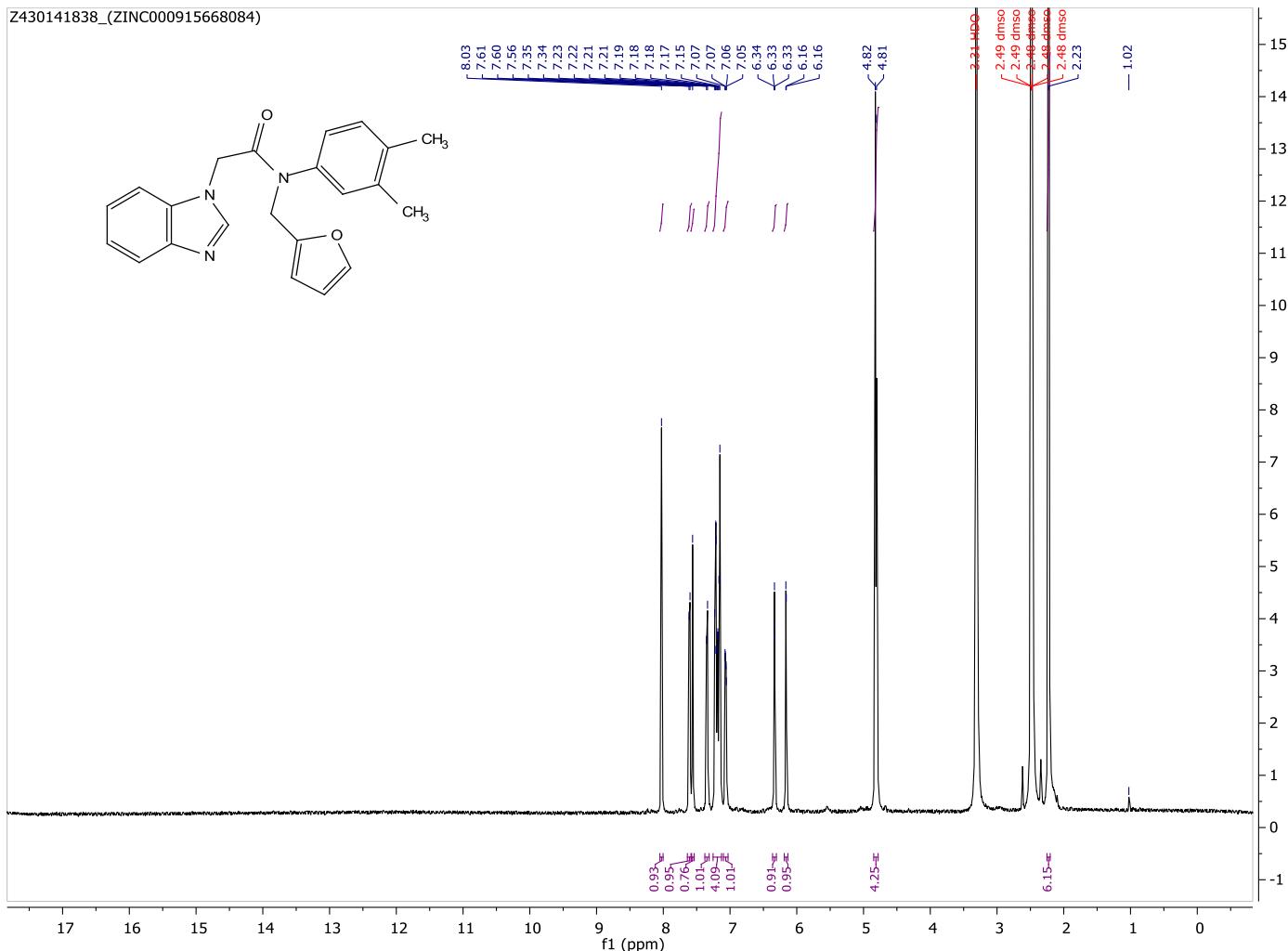
Mol Wt 359.42
Exact Mass 359.19
Time Area%

1 1.204 100.00

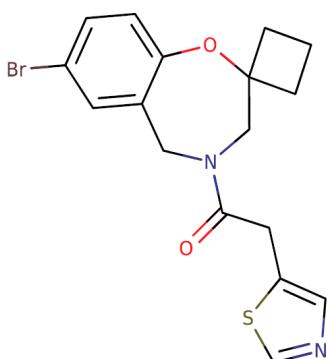


Z430141838_(ZINC000915668084)

Z430141838_(ZINC000915668084)

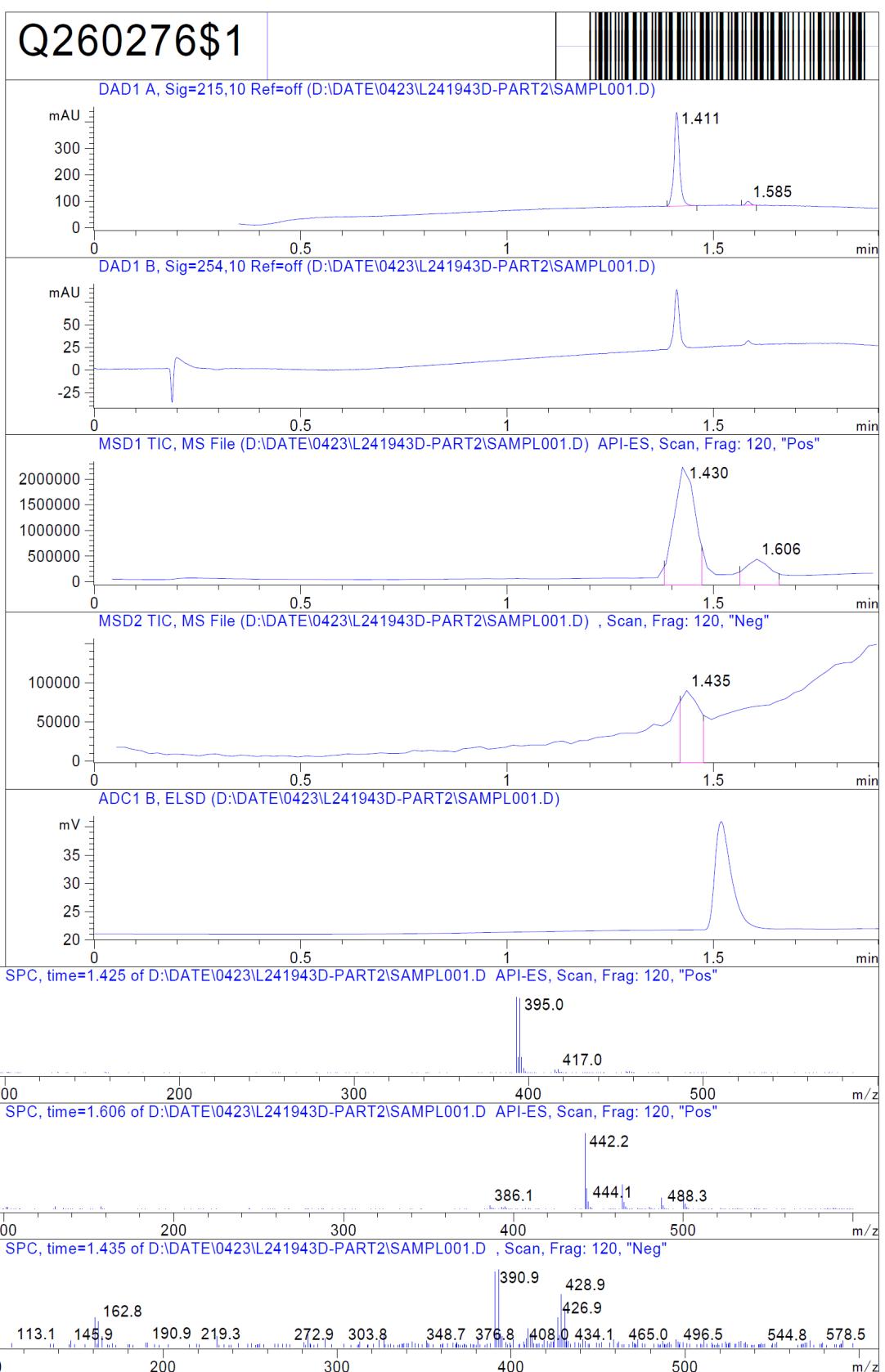


MaxPeak: 96.66%
Ret_Time: 1.411 min



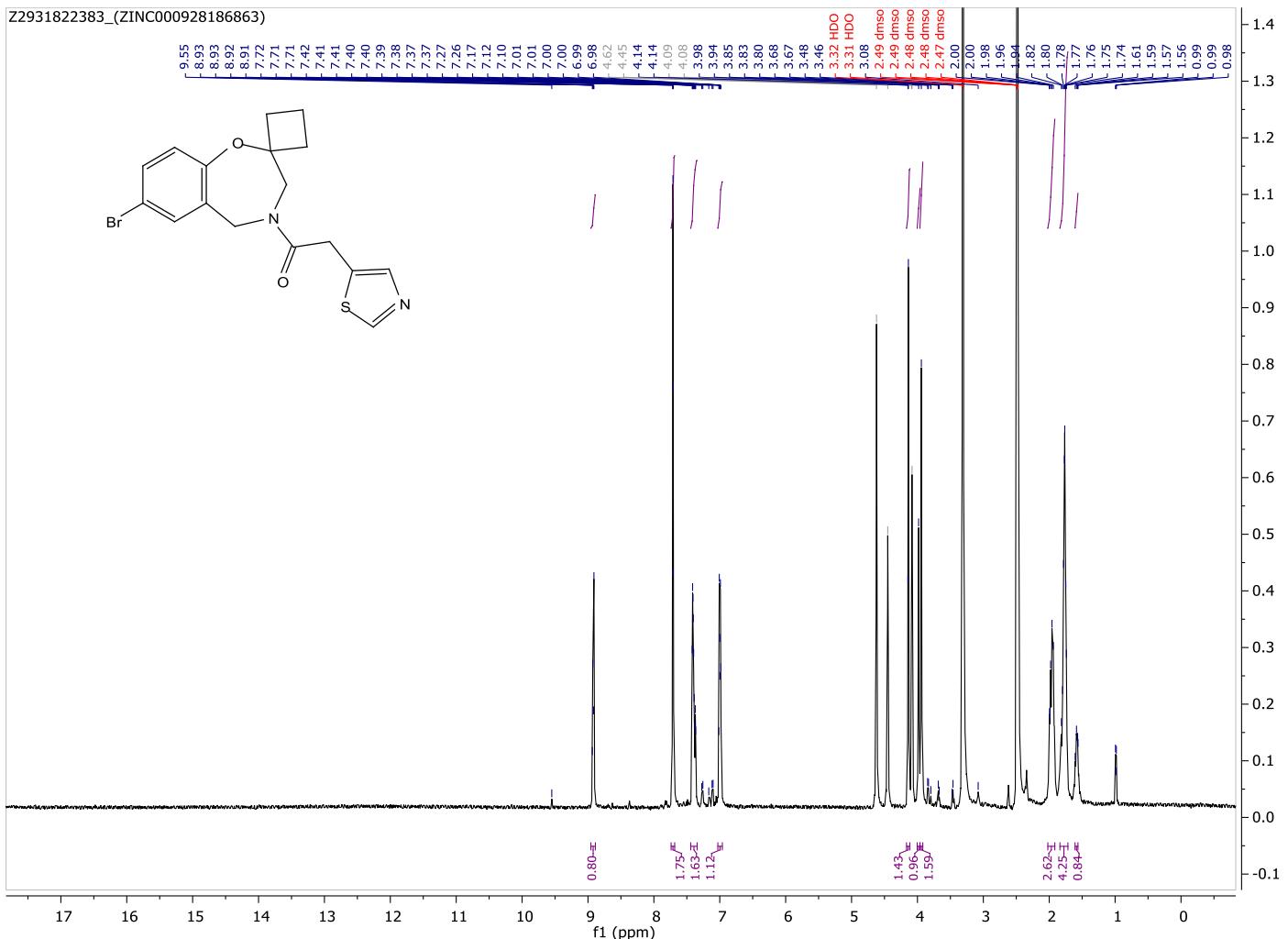
Mol Wt 393.3
Exact Mass 394.04

#	Time	Area%
1	1.411	96.66
2	1.585	3.34

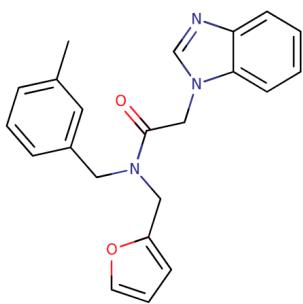


Z2931822383_(ZINC000928186863)

Z2931822383_(ZINC000928186863)

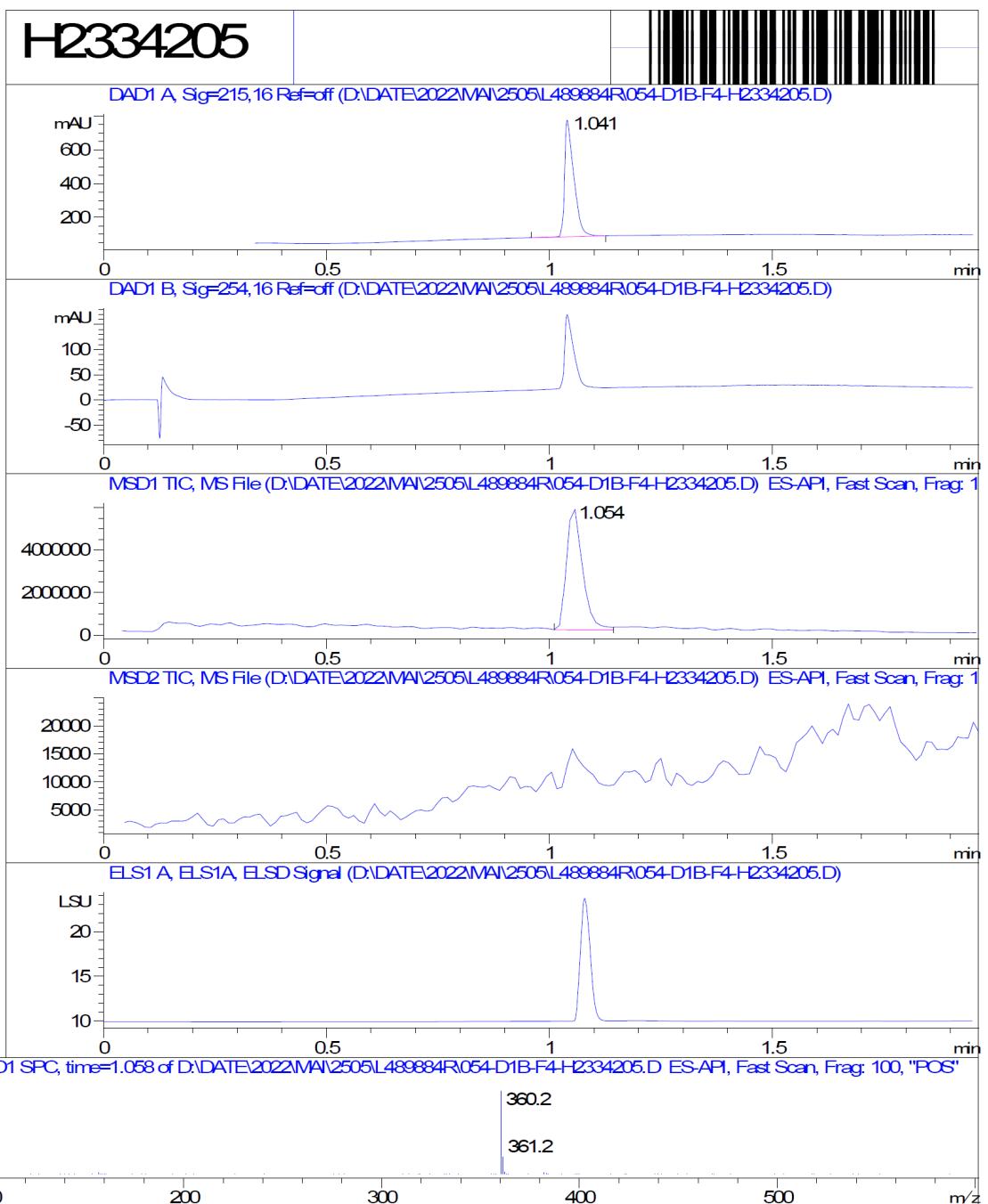


MaxPeak: 100.00%
Ret_Time: 1.041 min



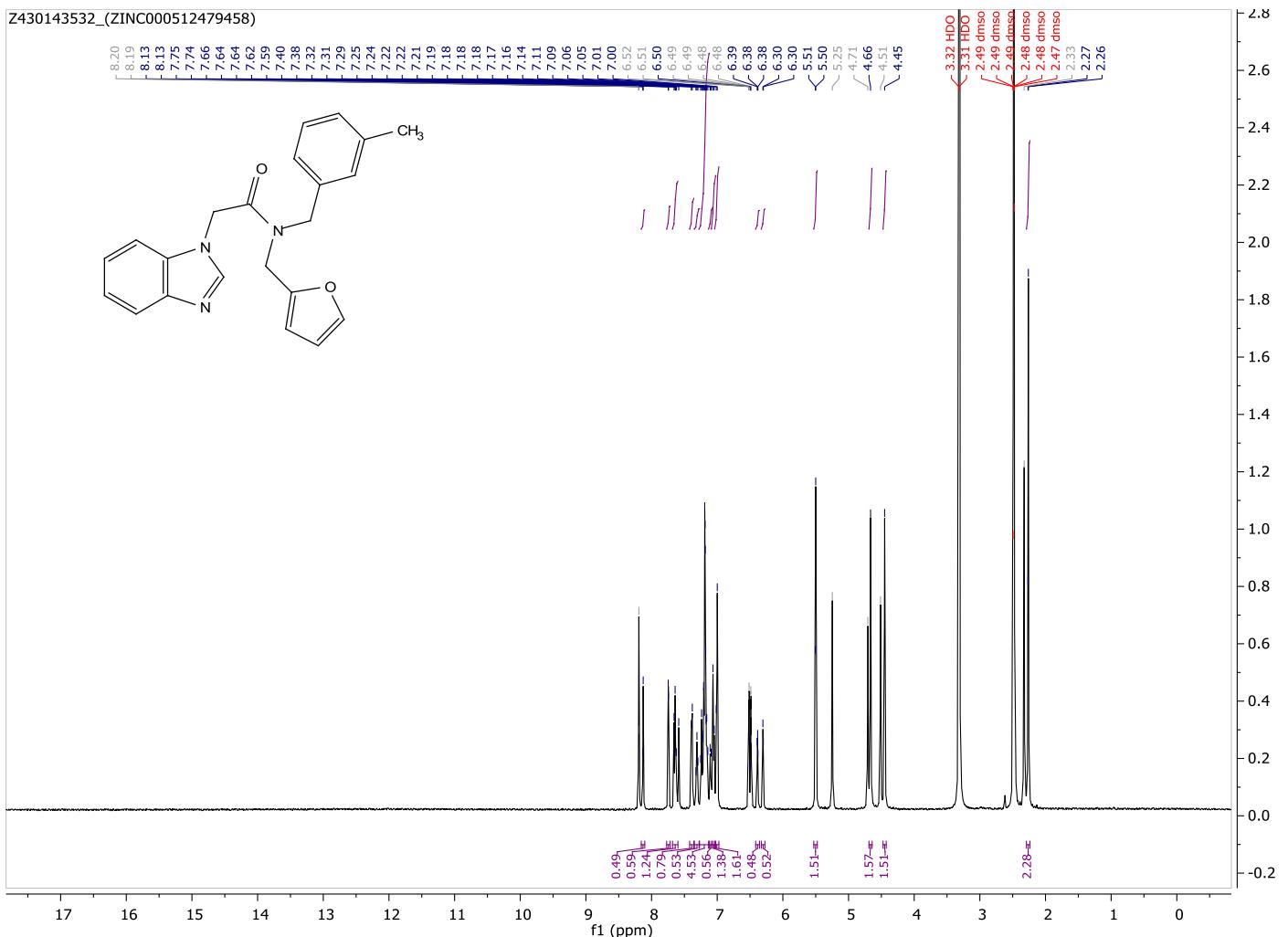
Mol Wt 359.42
Exact Mass 359.19
Time Area%

1 1.041 100.00

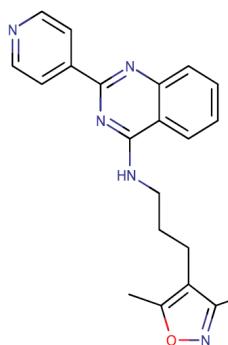


Z430143532_(ZINC000512479458)

Z430143532_(ZINC000512479458)

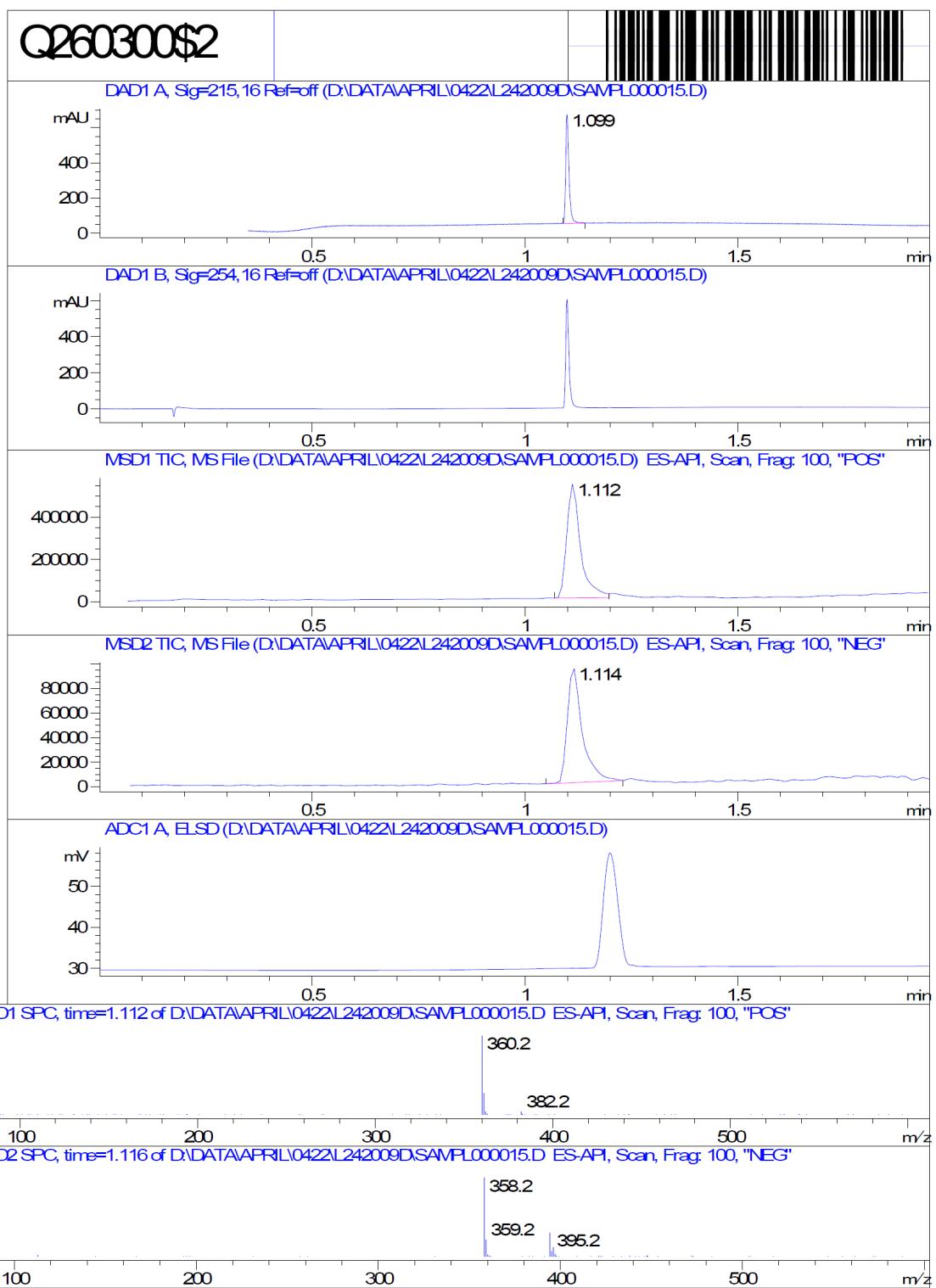


MaxPeak: 100.00%
Ret_Time: 1.099 min



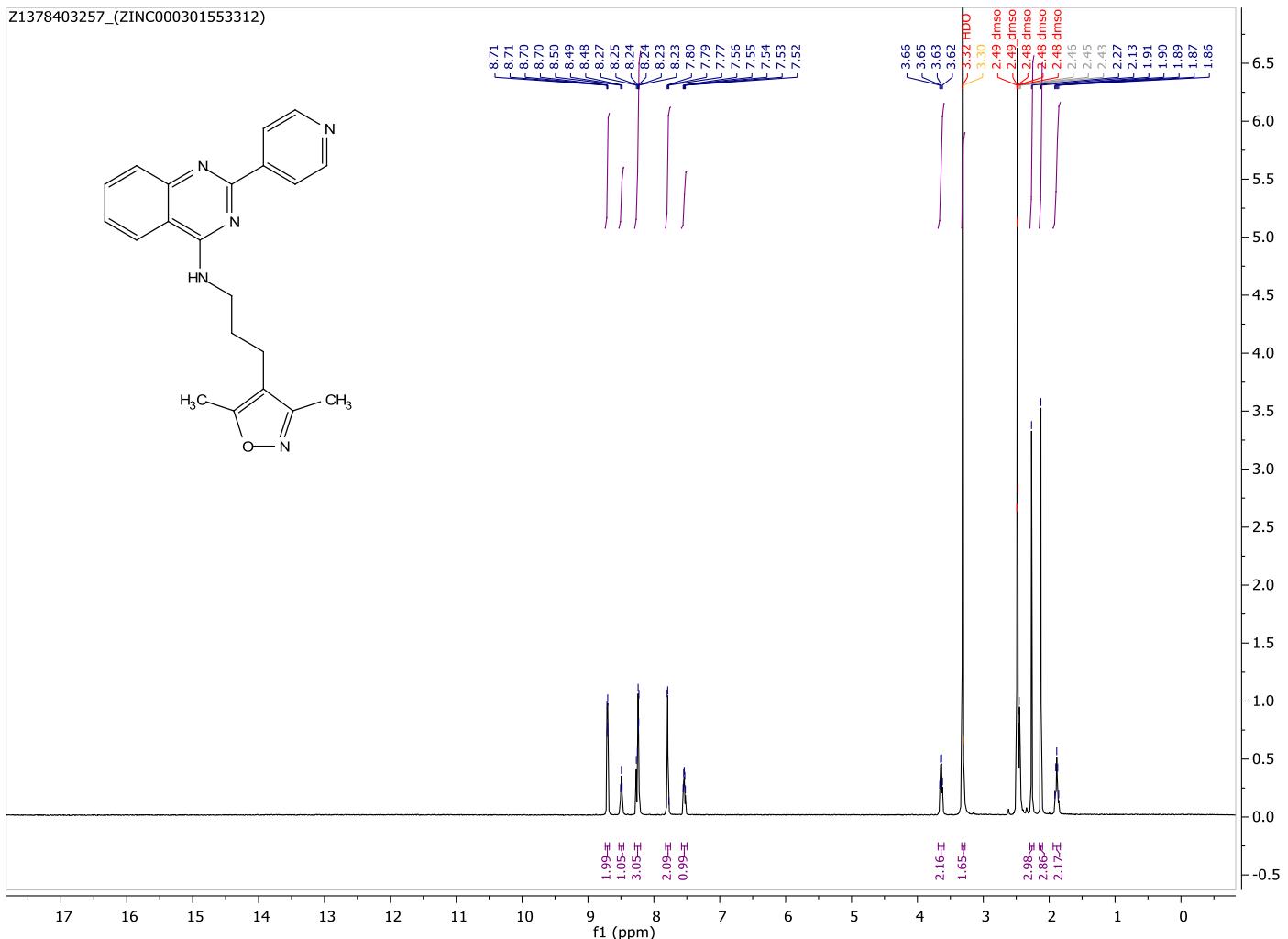
Mol Wt 359.42
Exact Mass 359.2
Time Area%

1 1.099 100.00

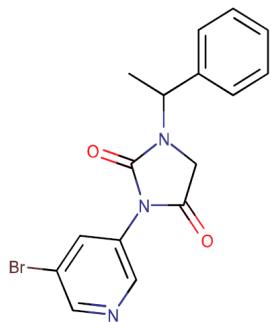


Z1378403257_(ZINC000301553312)

Z1378403257_(ZINC000301553312)

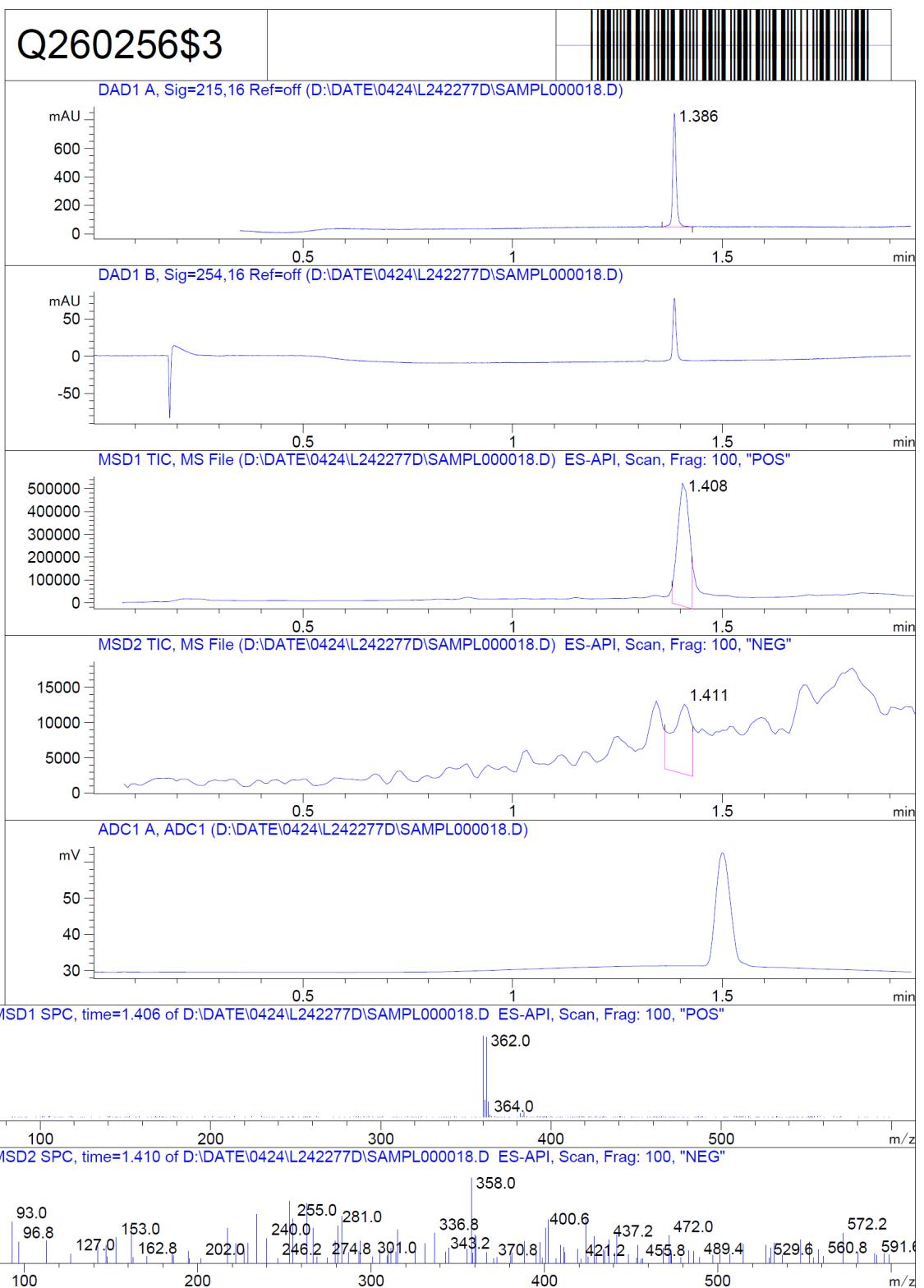


MaxPeak: 100.00%
Ret_Time: 1.386 min



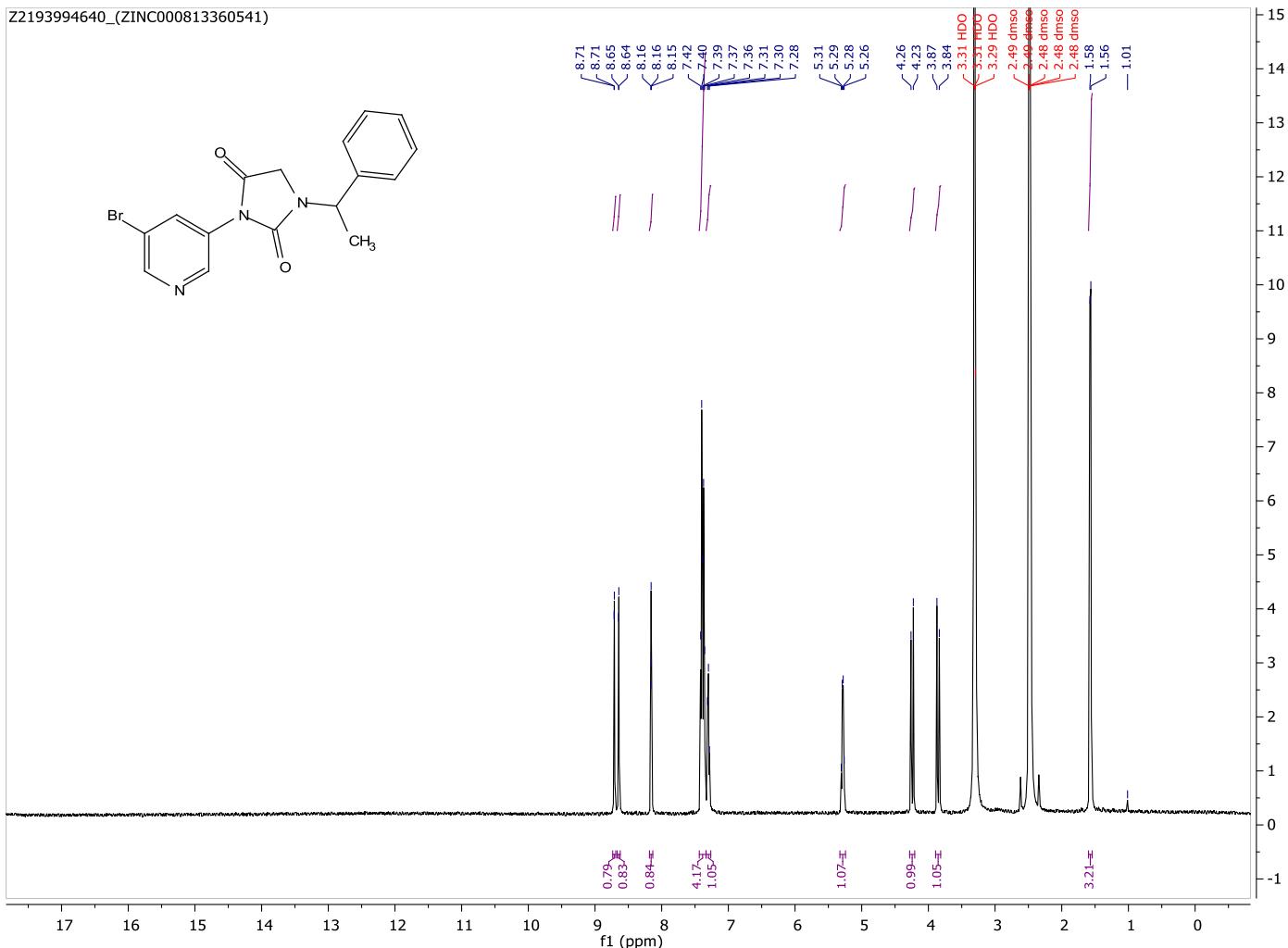
Mol Wt 360.2
Exact Mass 359.04
Time Area%

1 1.386 100.00

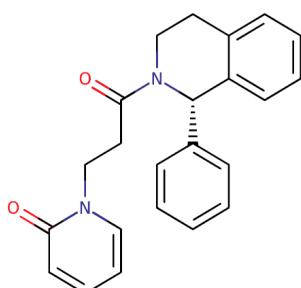


Z2193994640_(ZINC000813360541)

Z2193994640_(ZINC000813360541)

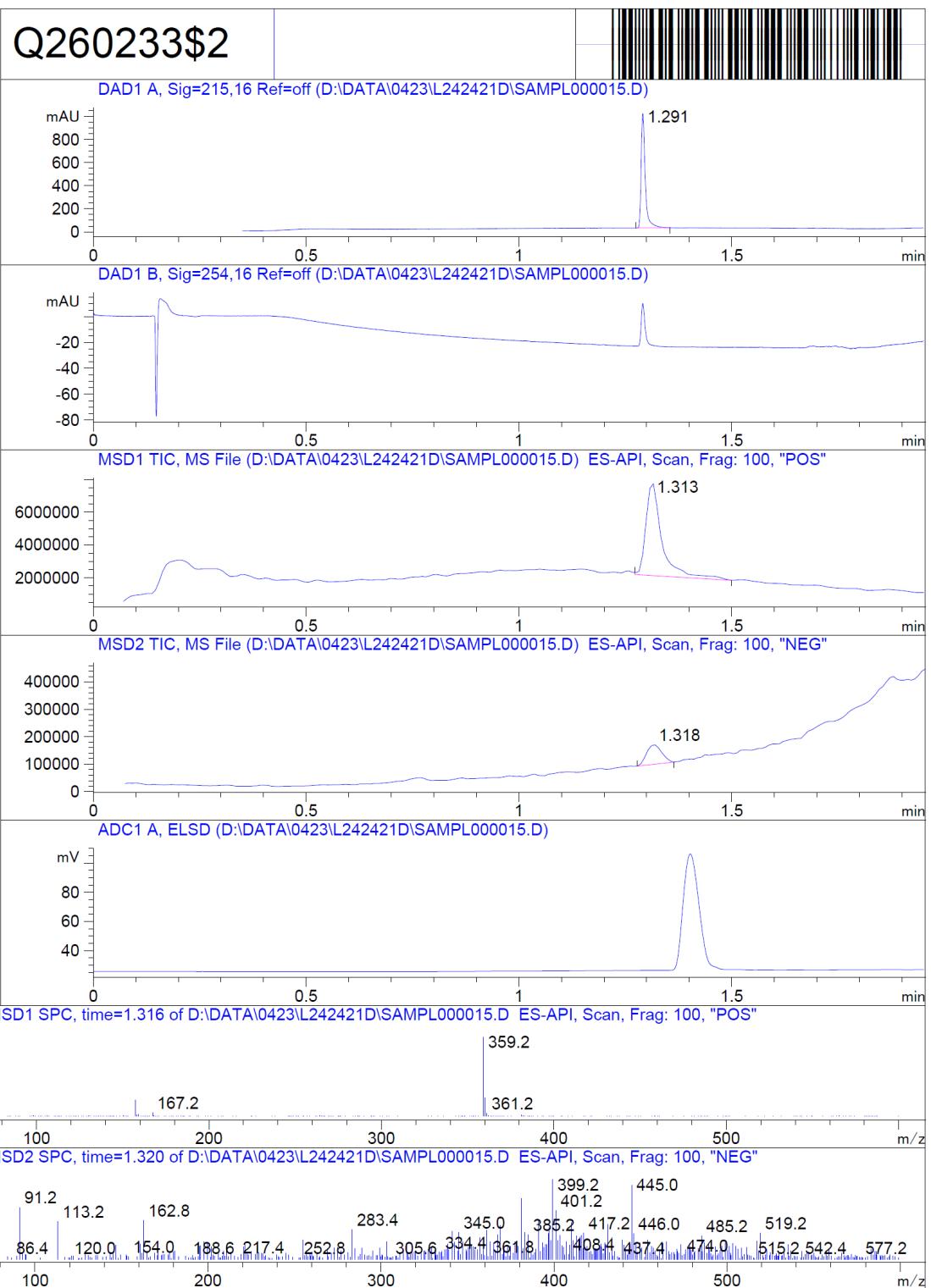


MaxPeak: 100.00%
Ret_Time: 1.291 min



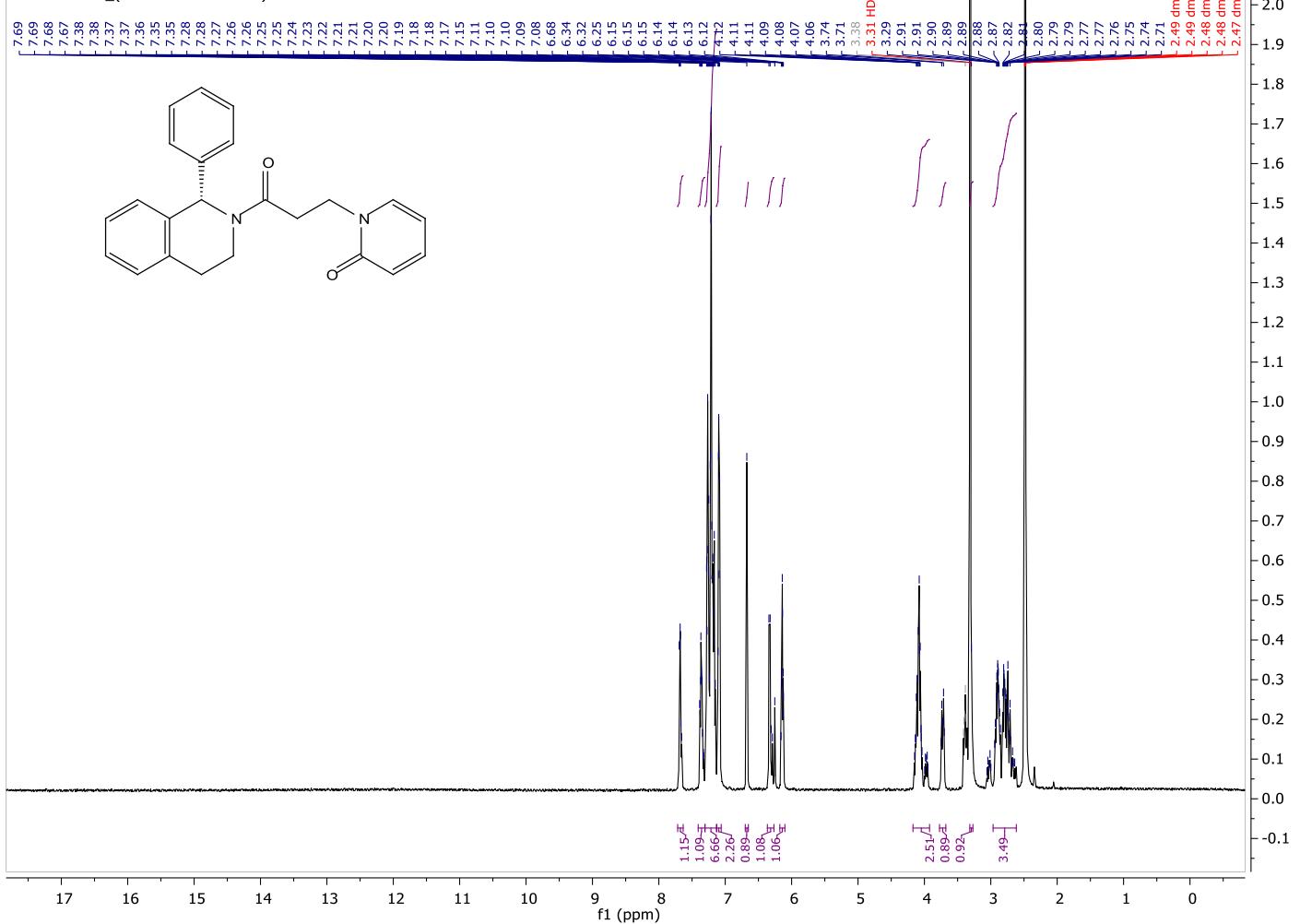
Mol Wt 358.43
Exact Mass 358.2
Time Area%

1 1.291 100.00

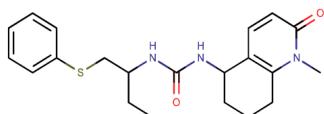


Z2232119003_(ZINC000594542103)

Z2232119003_(ZINC000594542103)

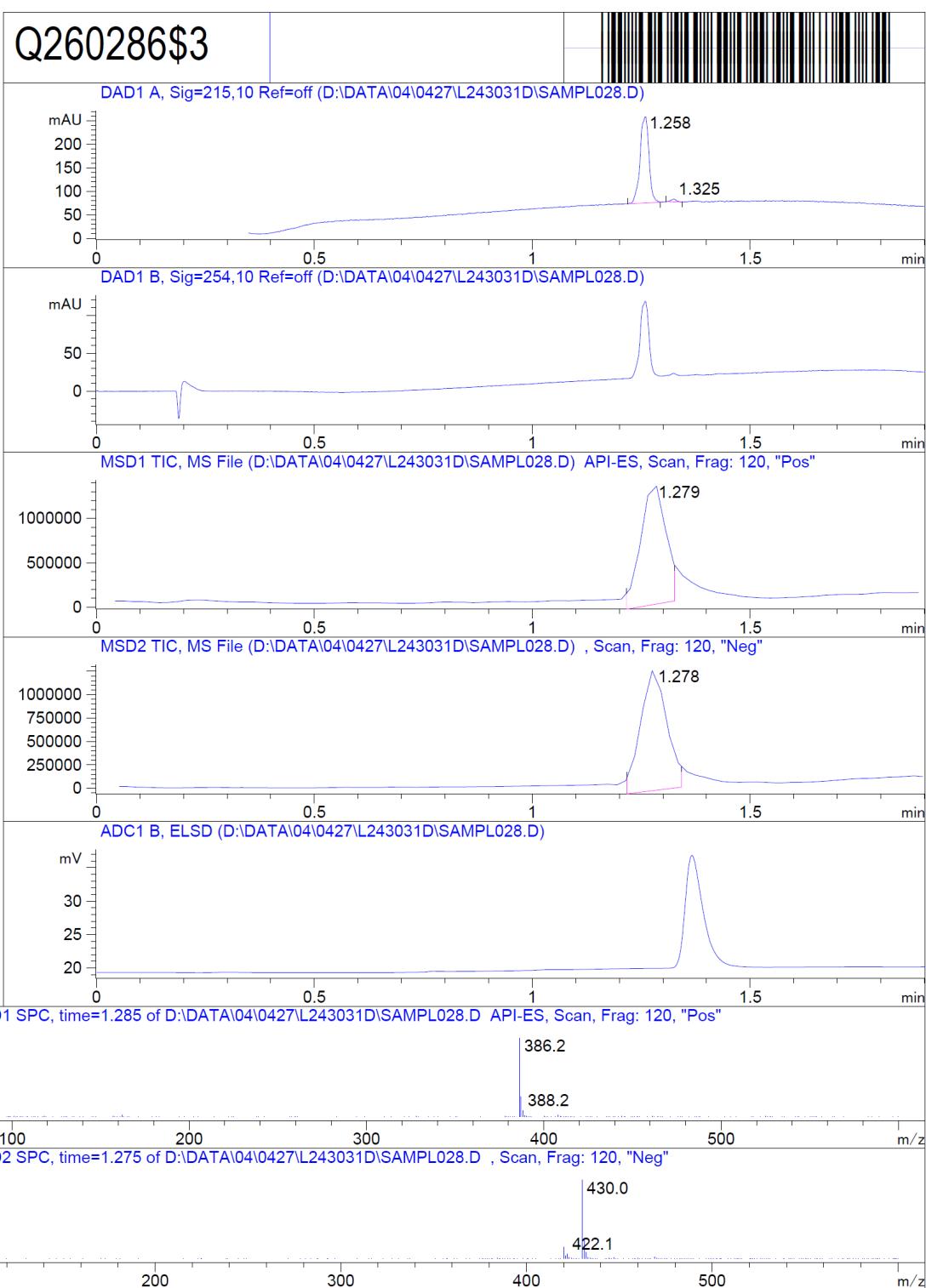


MaxPeak: 98.15%
Ret_Time: 1.258 min



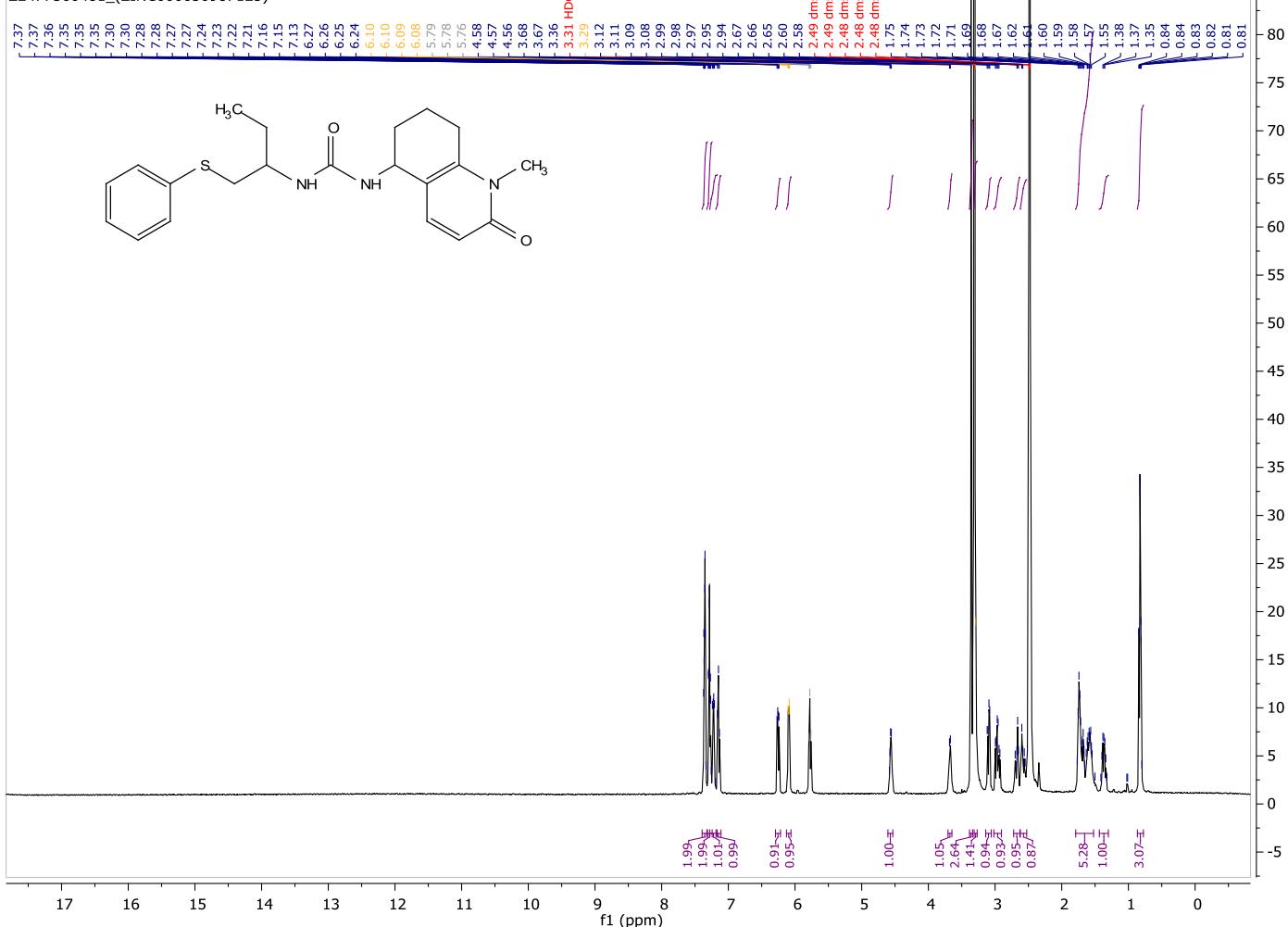
Mol Wt 385.52
Exact Mass 385.22

#	Time	Area%
1	1.258	98.15
2	1.325	1.85

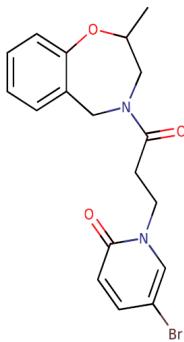


Z2477360481_(ZINC000650987125)

Z2477360481_(ZINC000650987125)

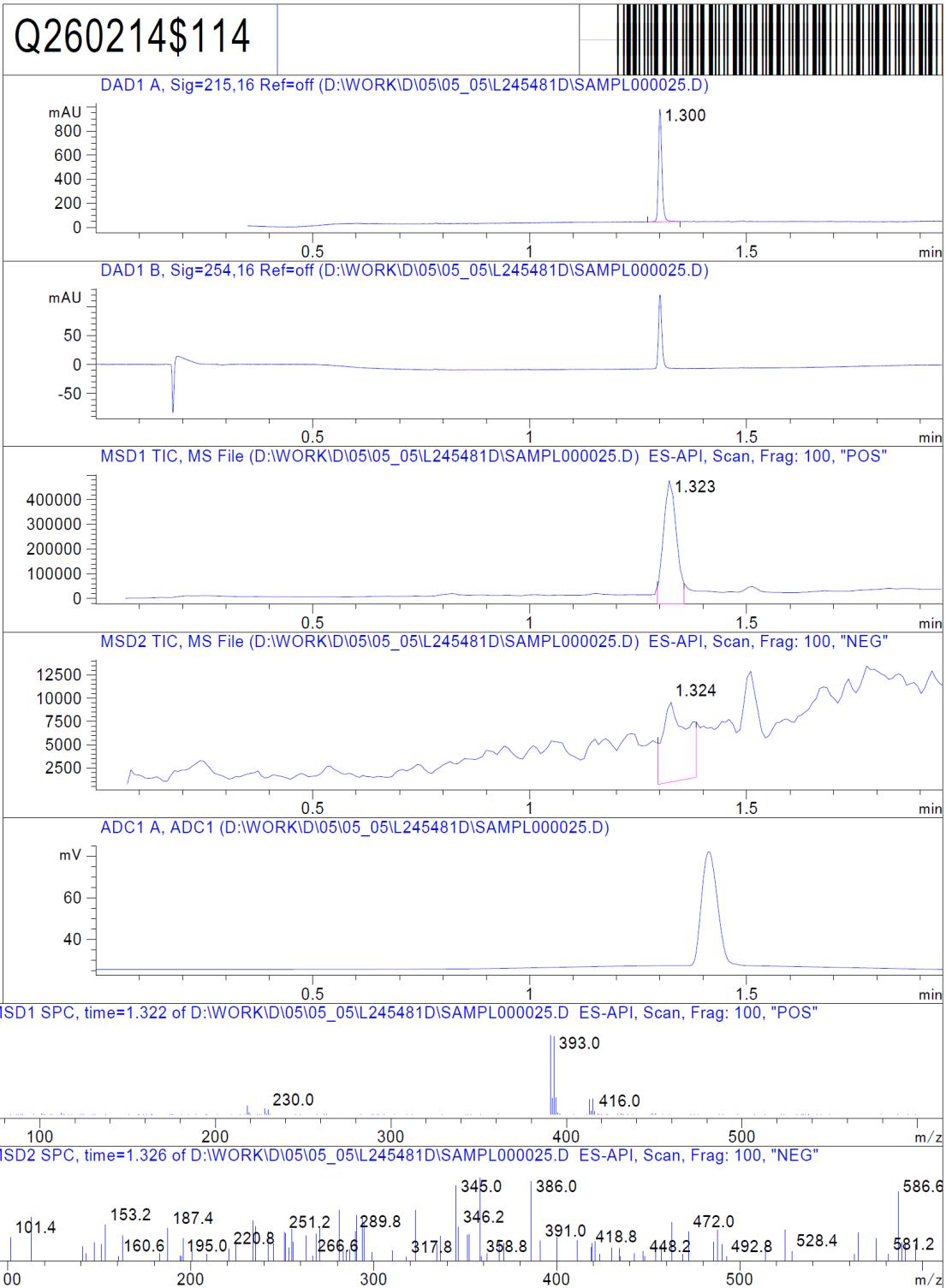


MaxPeak: 100.00%
Ret_Time: 1.300 min



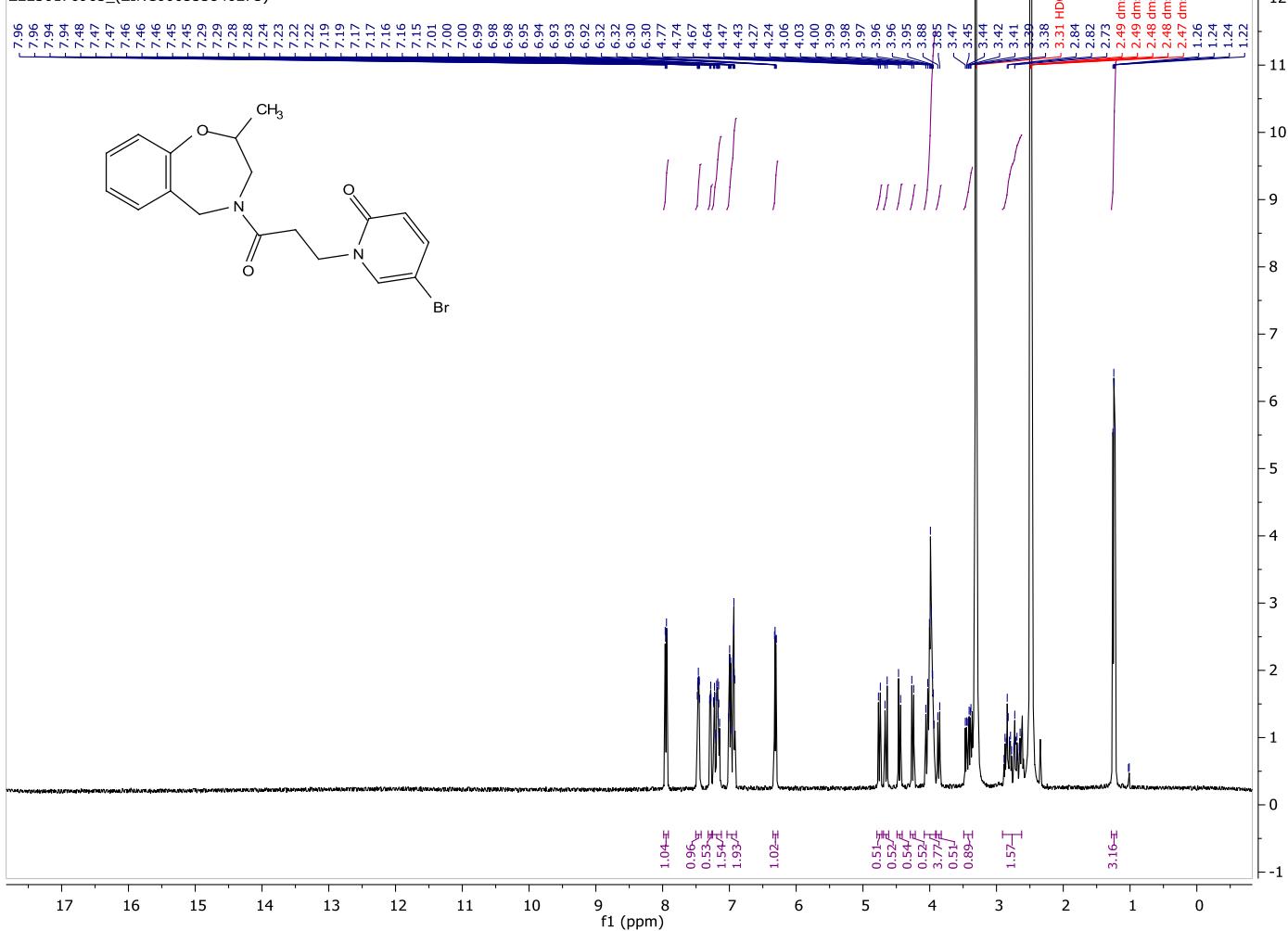
Mol Wt 391.26
Exact Mass 390.08
Time Area%

1 1.300 100.00

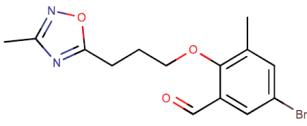


Z2230170963_(ZINC000553840273)

Z2230170963_(ZINC000553840273)

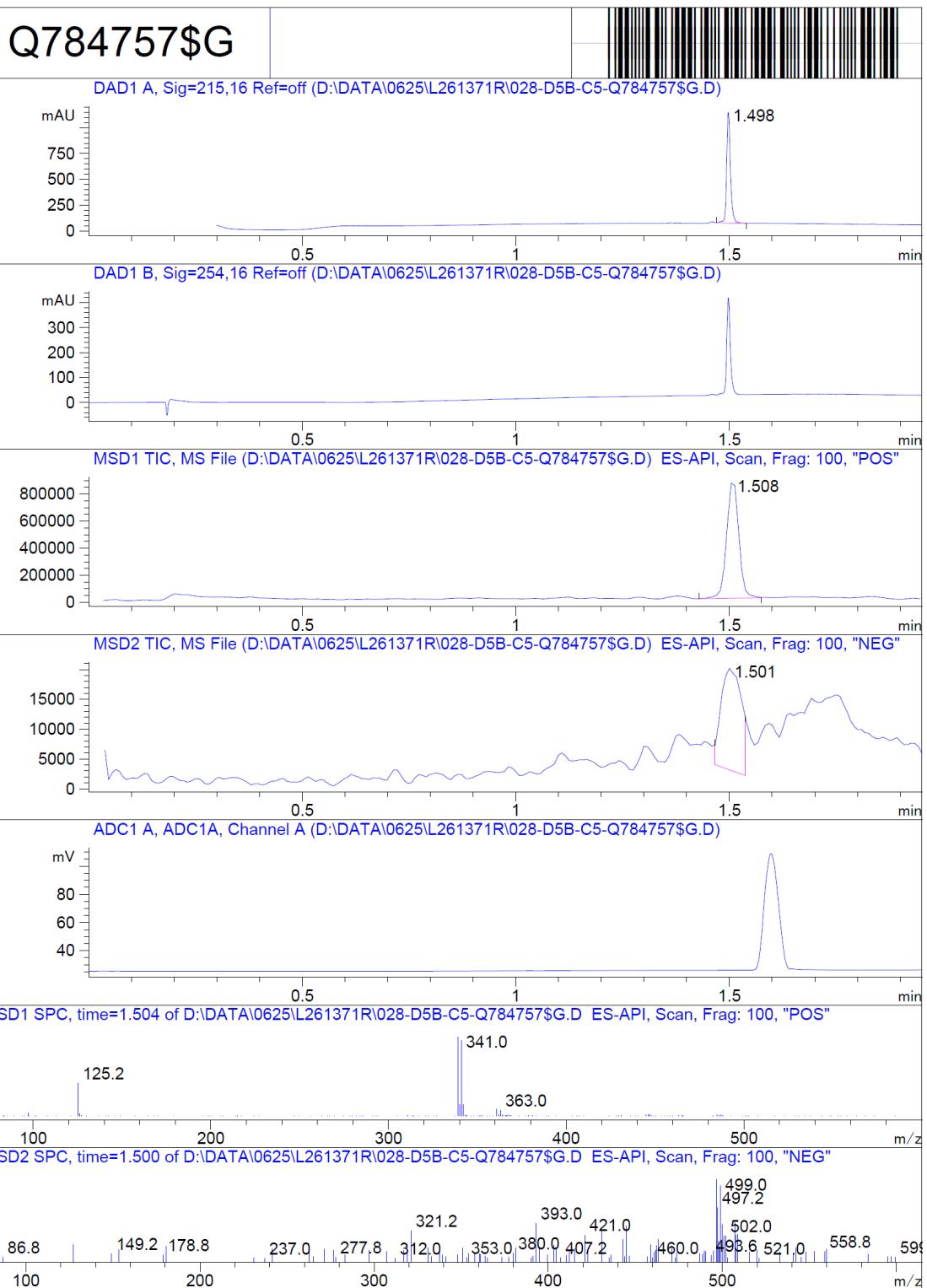


MaxPeak: 100.00%
Ret_Time: 1.498 min



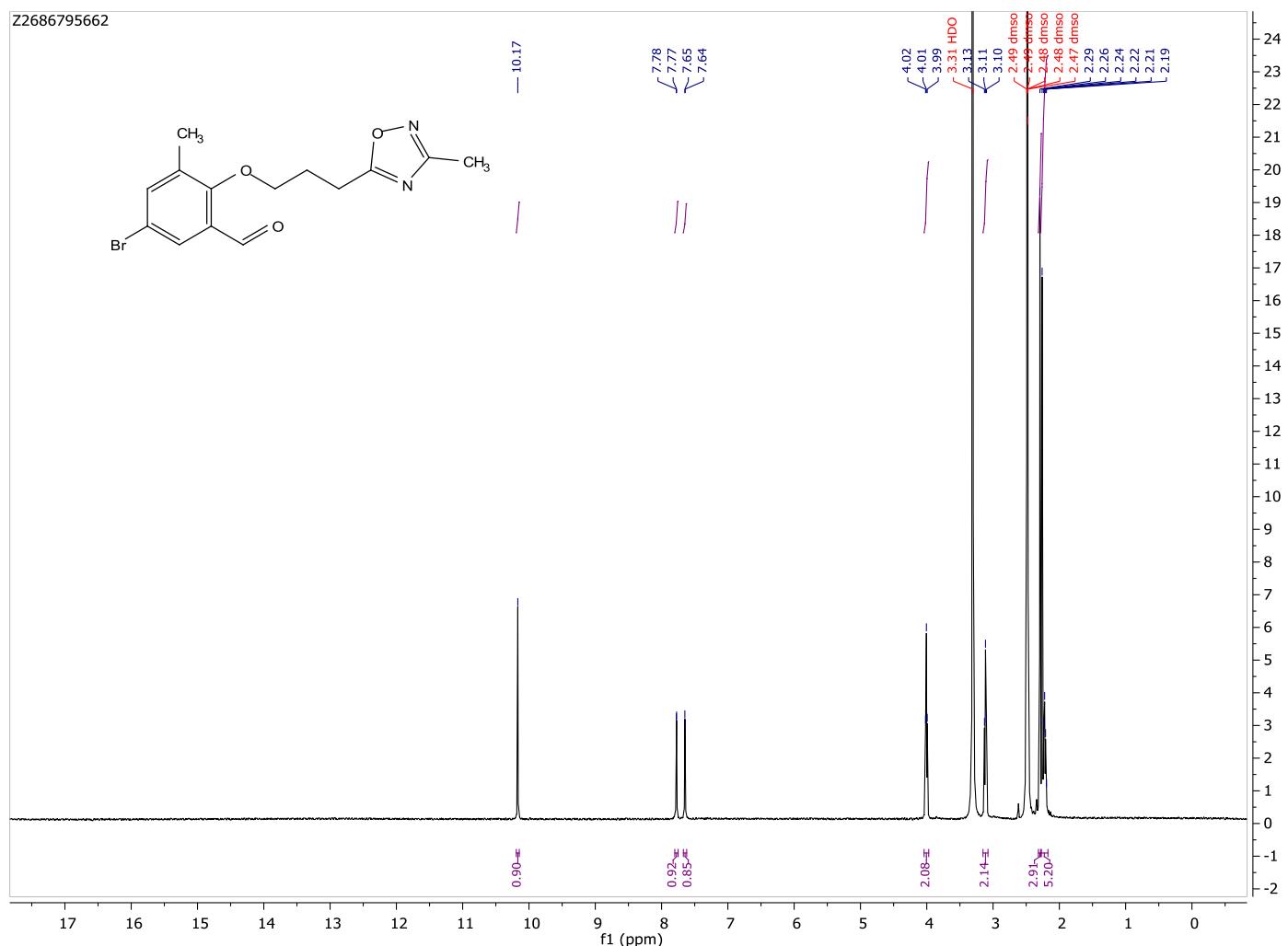
Mol Wt 339.18
Exact Mass 338.04
Time Area%

1 1.498 100.00

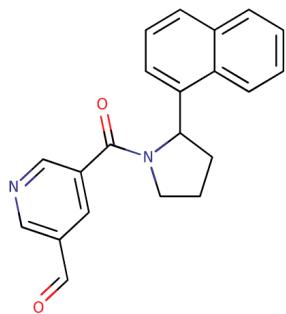


Z22686795662

Z22686795662



MaxPeak: 100.00%
Ret_Time: 1.142 min

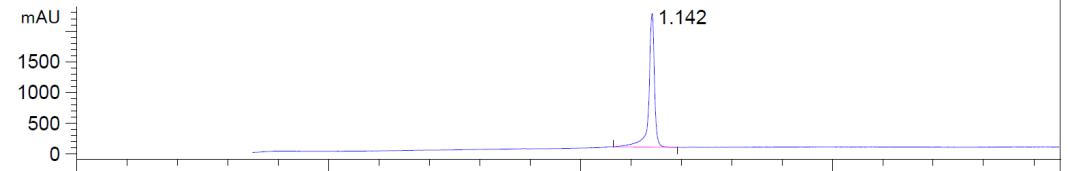


Mol Wt 330.38
Exact Mass 330.16
Time Area%

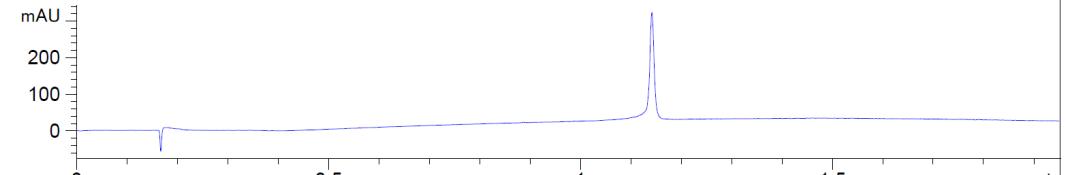
1 1.142 100.00

Q763572\$3

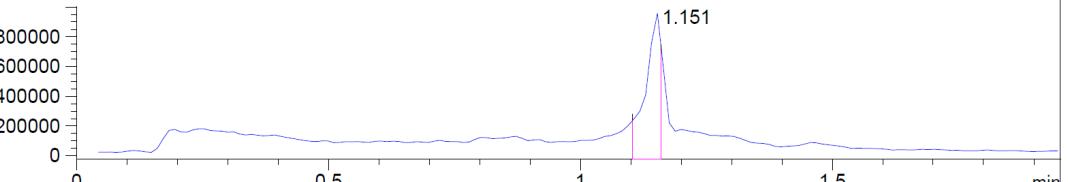
DAD1 A, Sig=215,16 Ref=off (D:\DATA\0629\L261459D\012-D5B-B2-Q763572\$3.D)



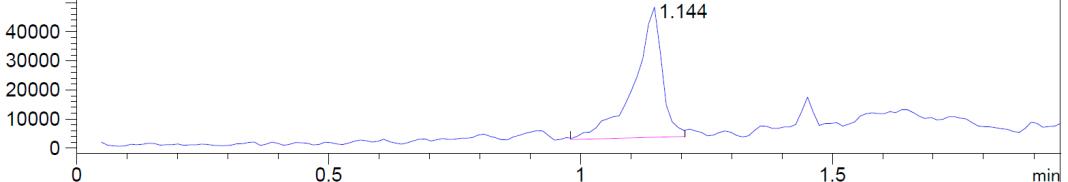
DAD1 B, Sig=254,16 Ref=off (D:\DATA\0629\L261459D\012-D5B-B2-Q763572\$3.D)



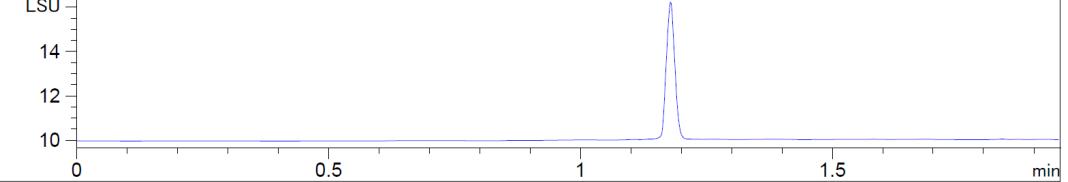
MSD1 TIC, MS File (D:\DATA\0629\L261459D\012-D5B-B2-Q763572\$3.D) ES-API, Fast Scan, Frag: 100, "POS"



MSD2 TIC, MS File (D:\DATA\0629\L261459D\012-D5B-B2-Q763572\$3.D) ES-API, Fast Scan, Frag: 100, "NEG"

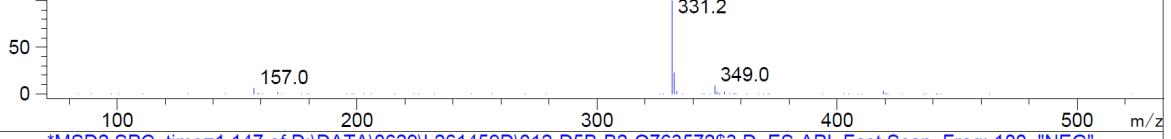


ELS1 A, ELS1A, ELSD Signal (D:\DATA\0629\L261459D\012-D5B-B2-Q763572\$3.D)

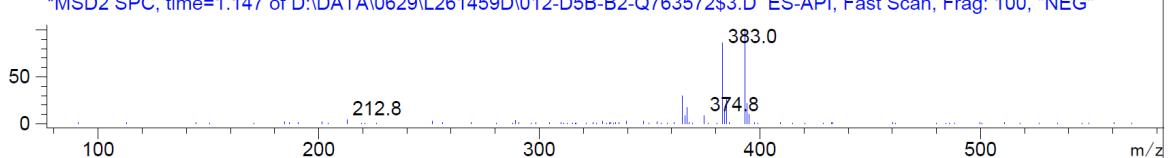


*MSD1 SPC, time=1.153 of D:\DATA\0629\L261459D\012-D5B-B2-Q763572\$3.D ES-API, Fast Scan, Frag: 100, "POS"

RT 1.151

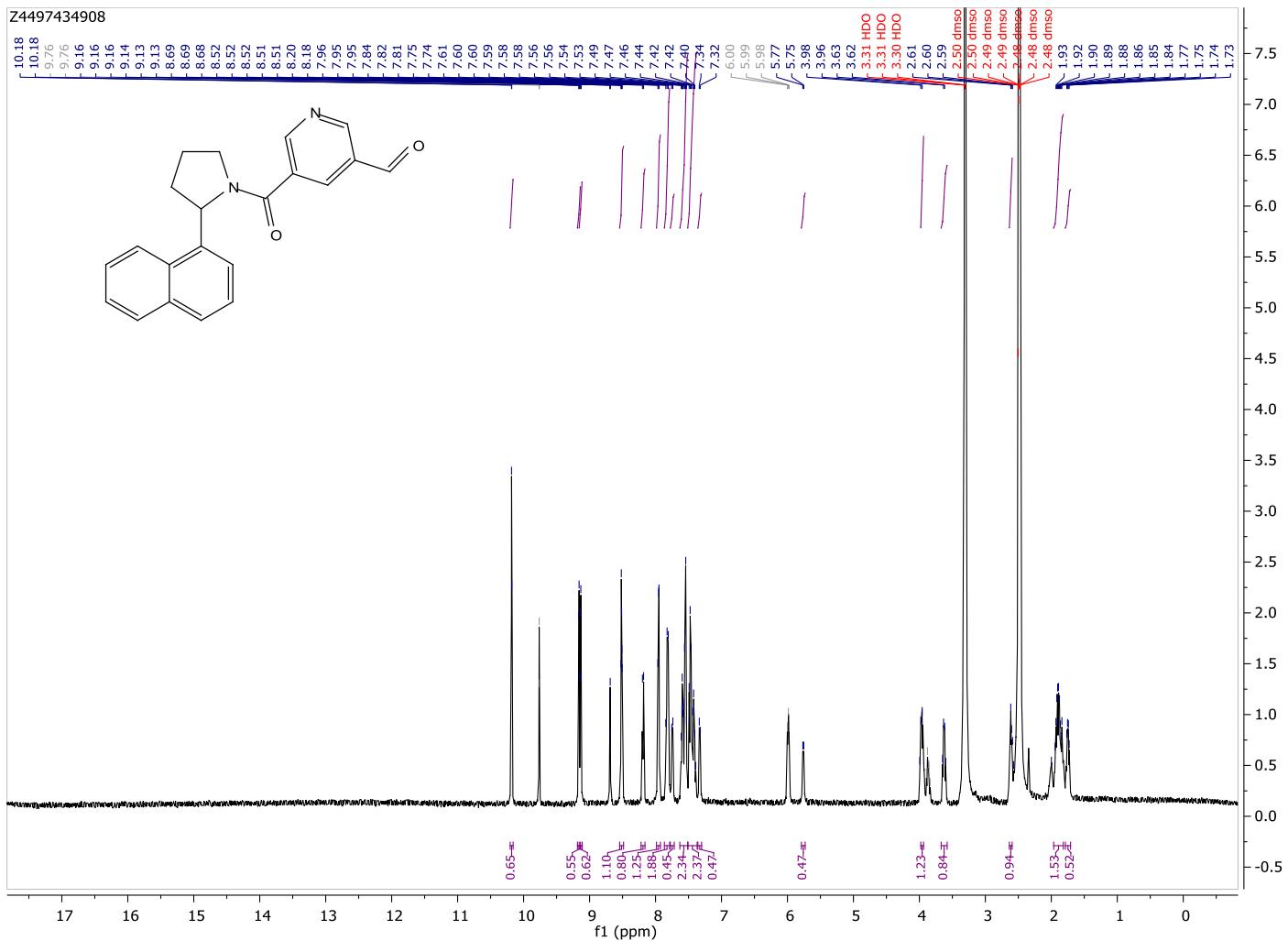


RT 1.144

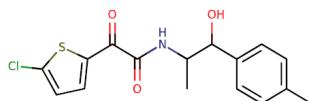


Z4497434908

Z4497434908

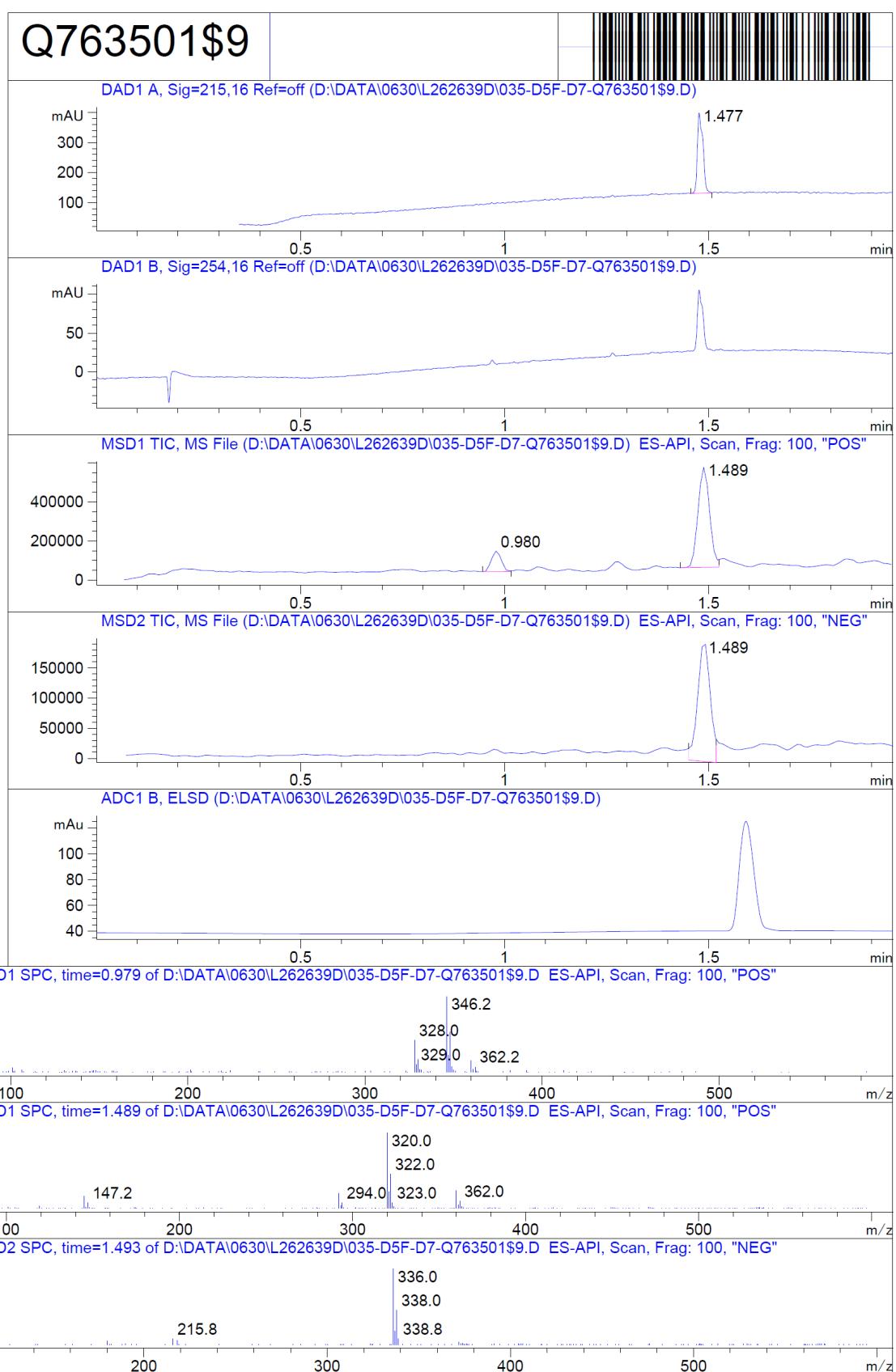


MaxPeak: 100.00%
Ret_Time: 1.477 min



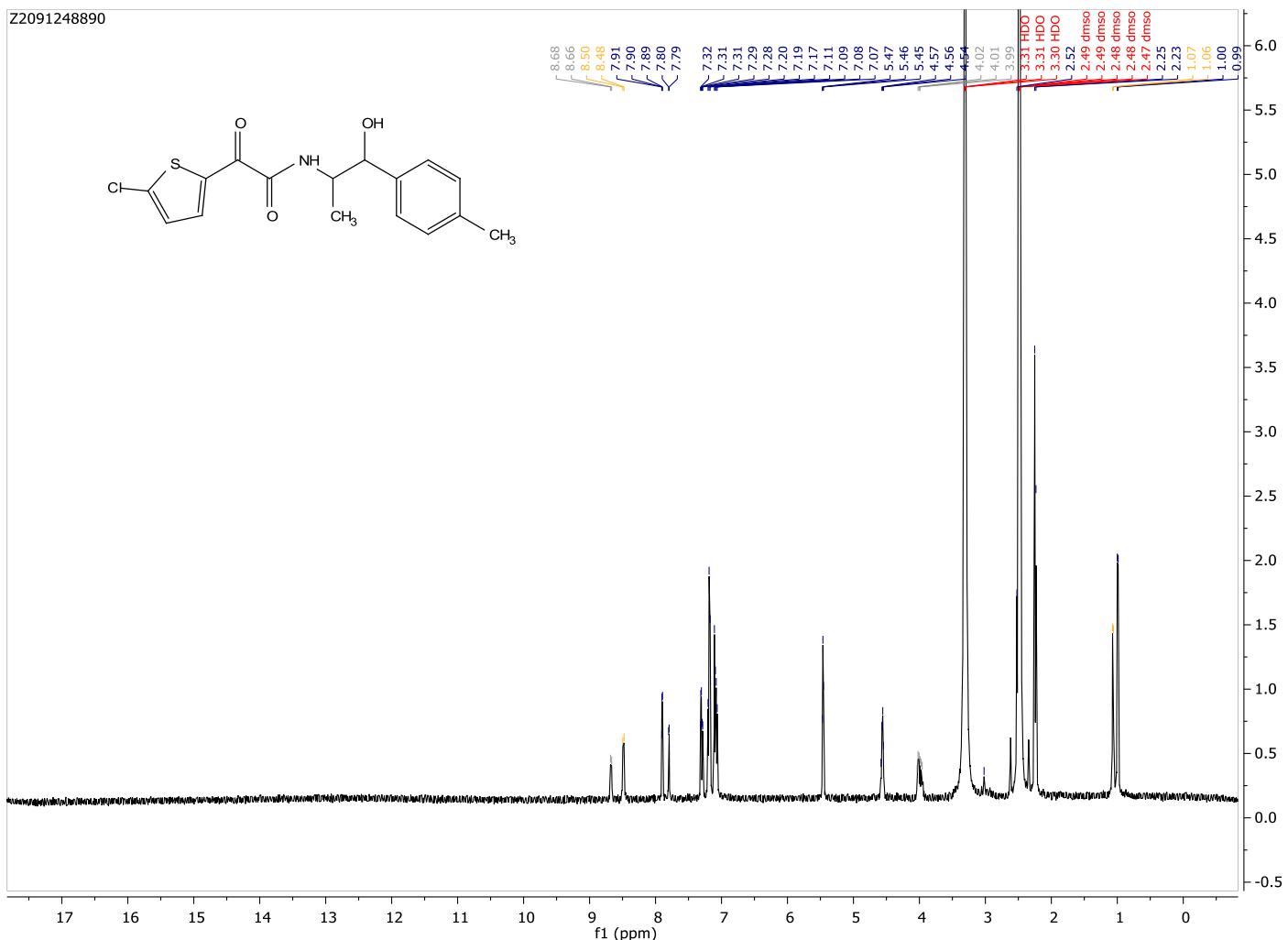
Mol Wt 337.82
Exact Mass 337.07

#	Time	Area%
1	1.477	100.00

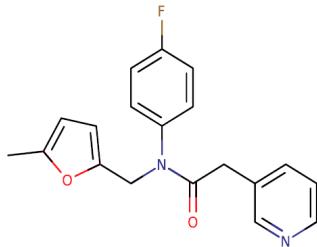


Z2091248890

Z2091248890

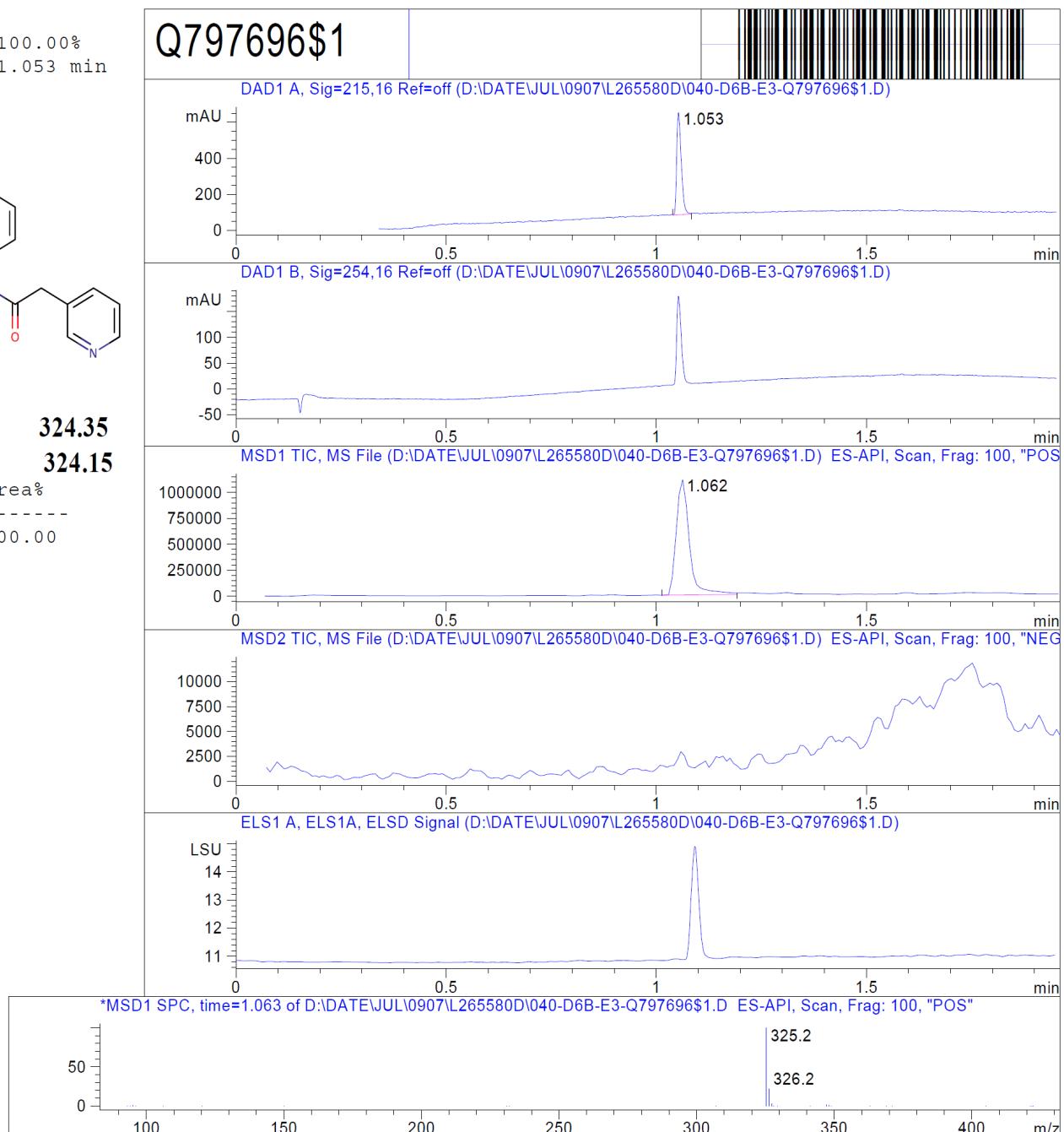


MaxPeak: 100.00%
Ret_Time: 1.053 min



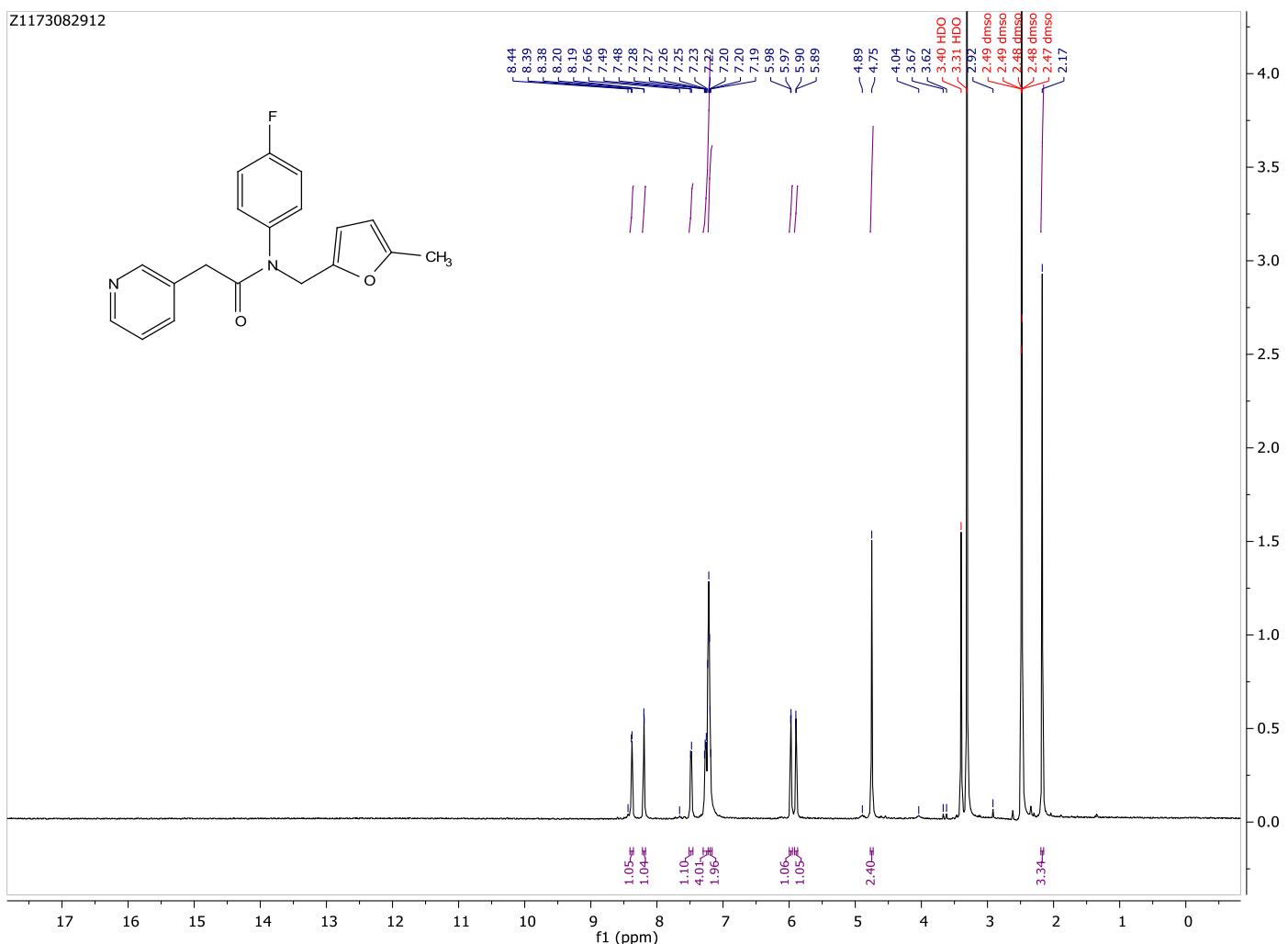
Mol Wt 324.35
Exact Mass 324.15
Time Area%

1 1.053 100.00

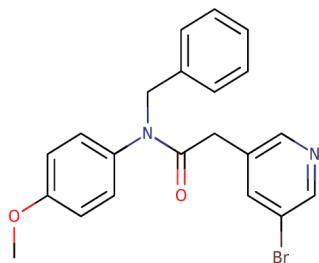


Z1173082912

Z1173082912

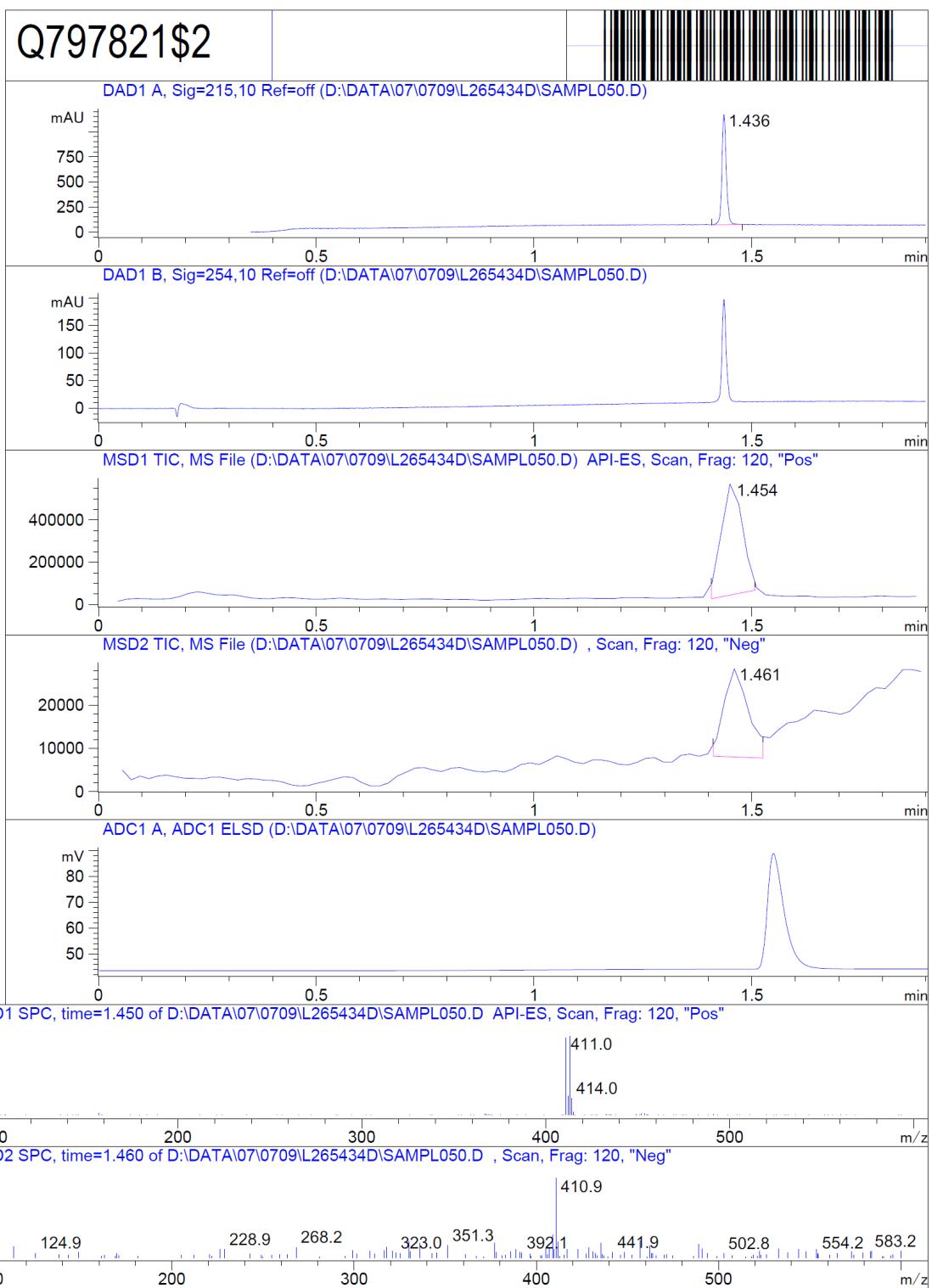


MaxPeak: 100.00%
Ret_Time: 1.436 min



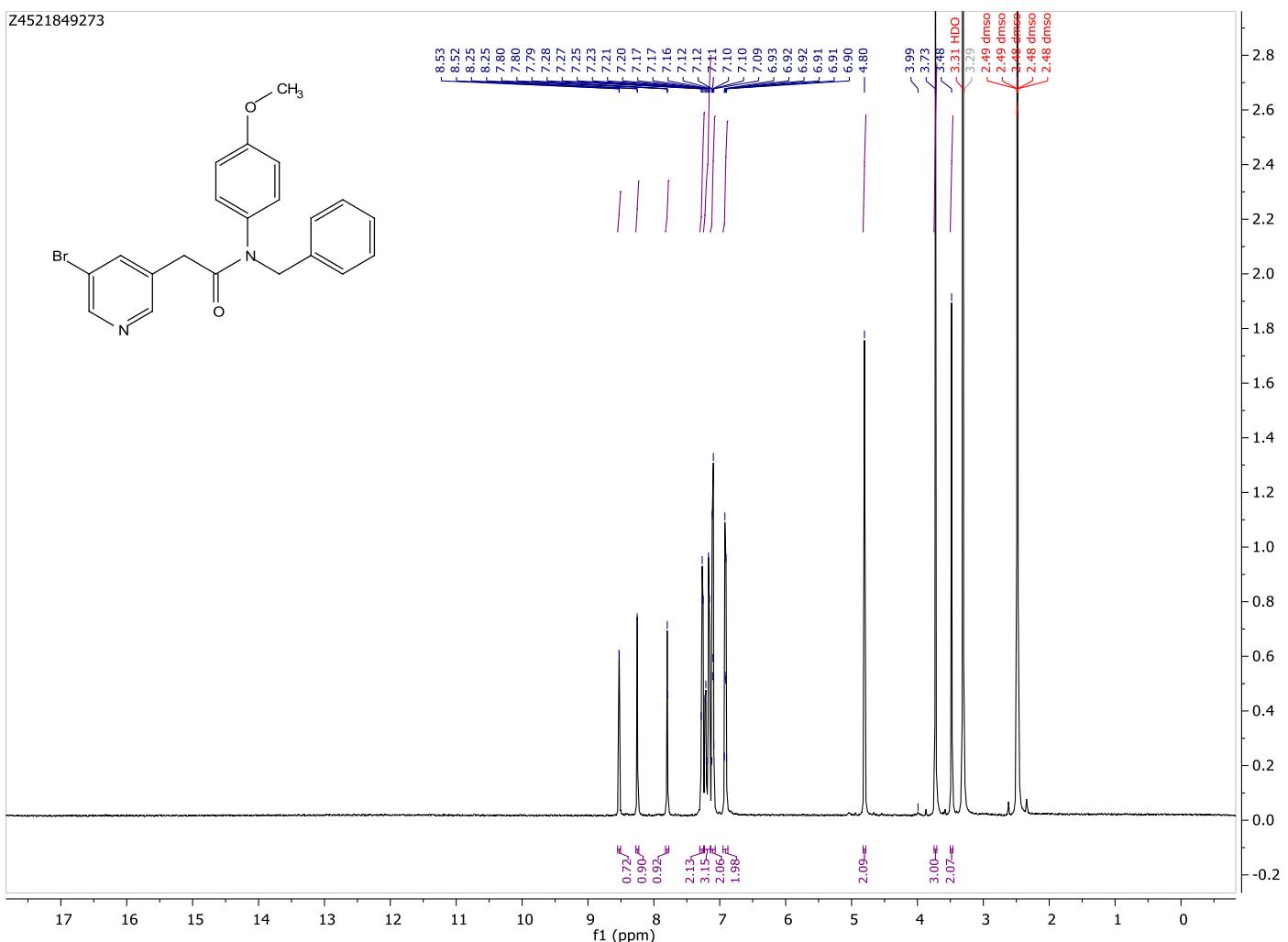
Mol Wt 411.29
Exact Mass 412.09
Time Area%

1 1.436 100.00

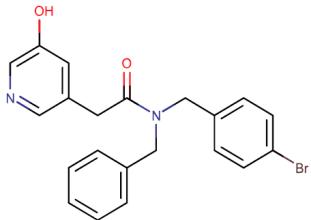


Z4521849273

Z4521849273

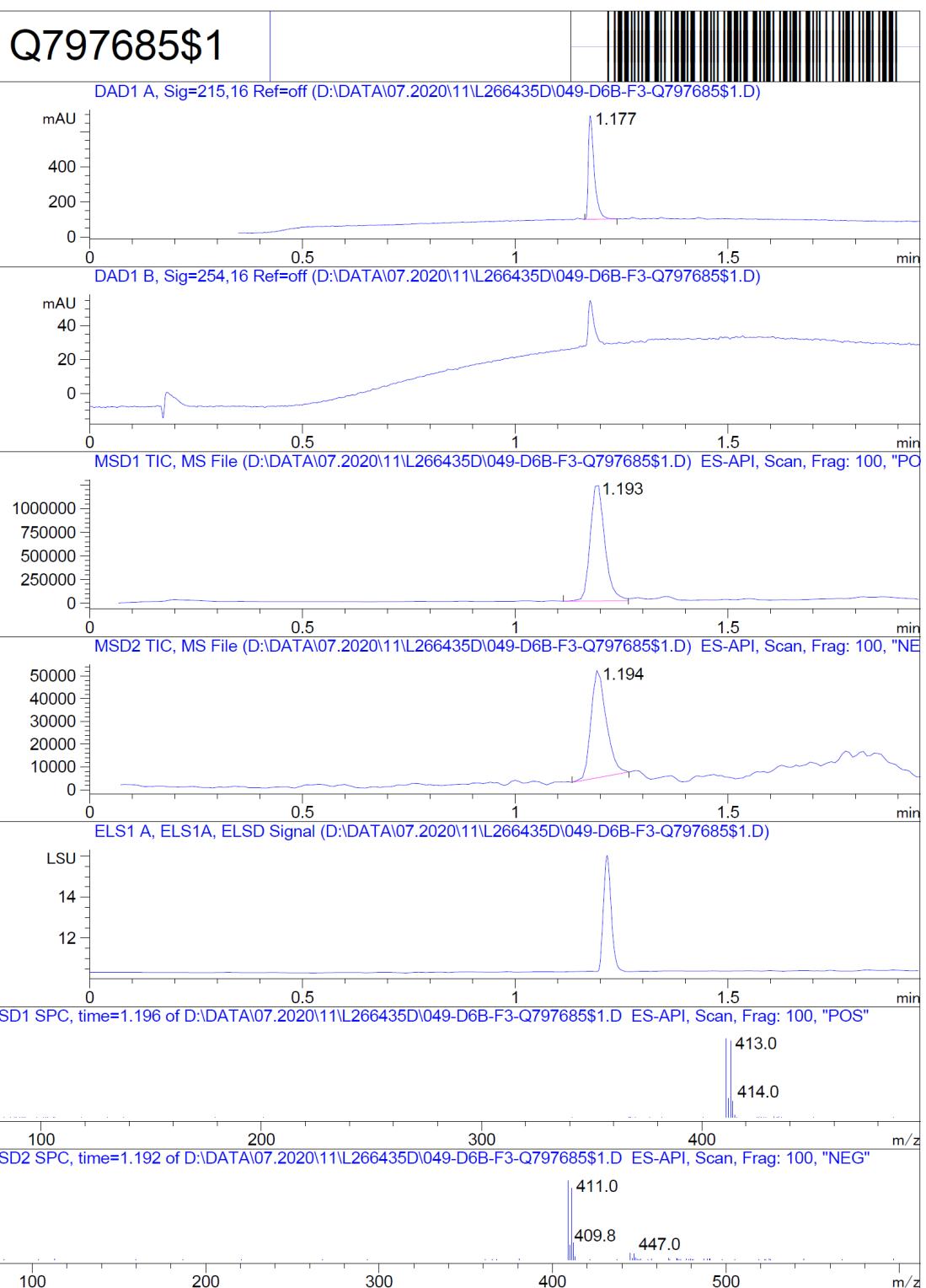


MaxPeak: 100.00%
Ret_Time: 1.177 min



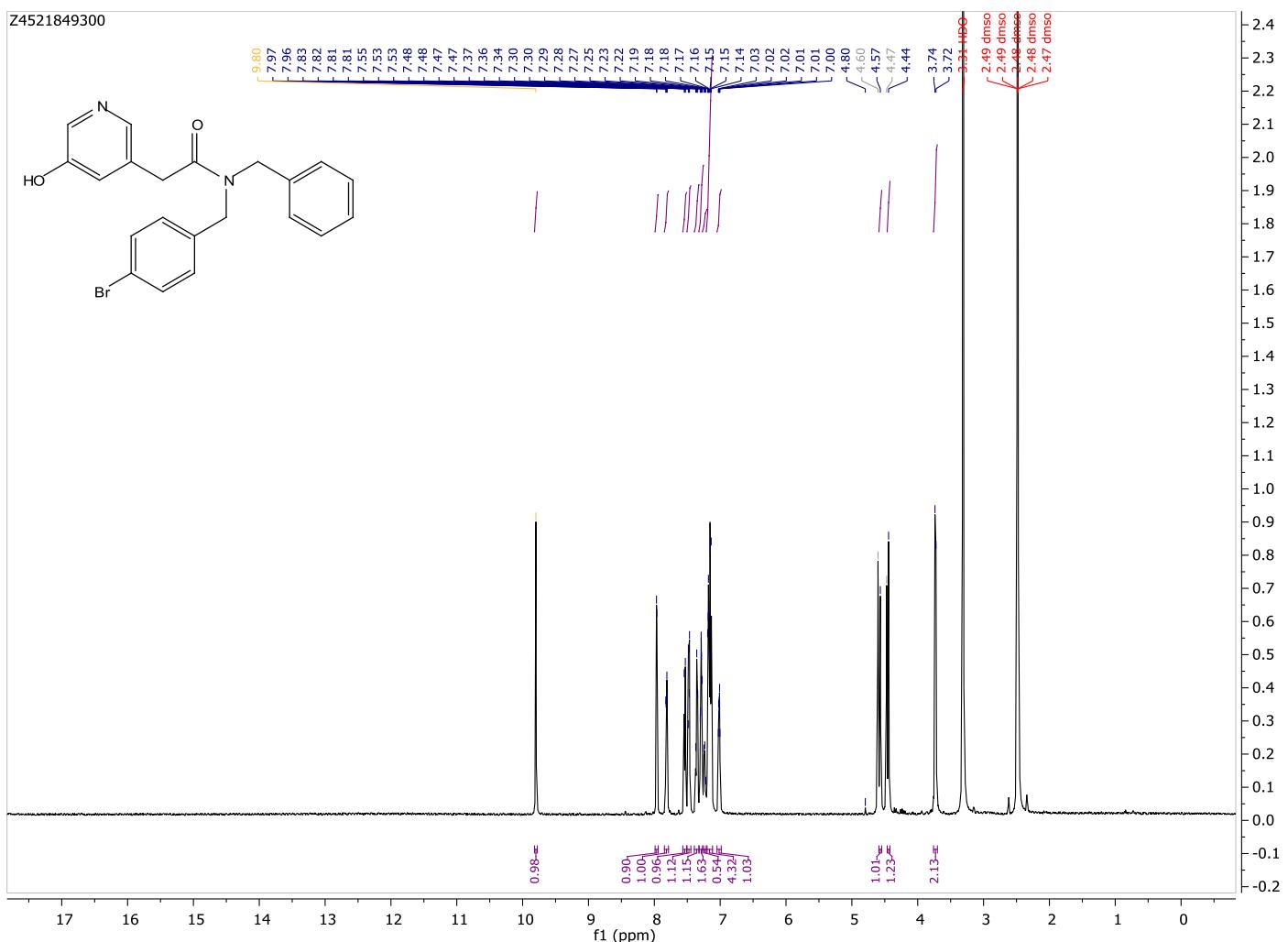
Mol Wt 411.29
Exact Mass 412.09
Time Area%

1 1.177 100.00

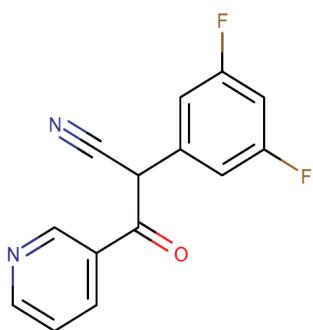


Z4521849300

Z4521849300

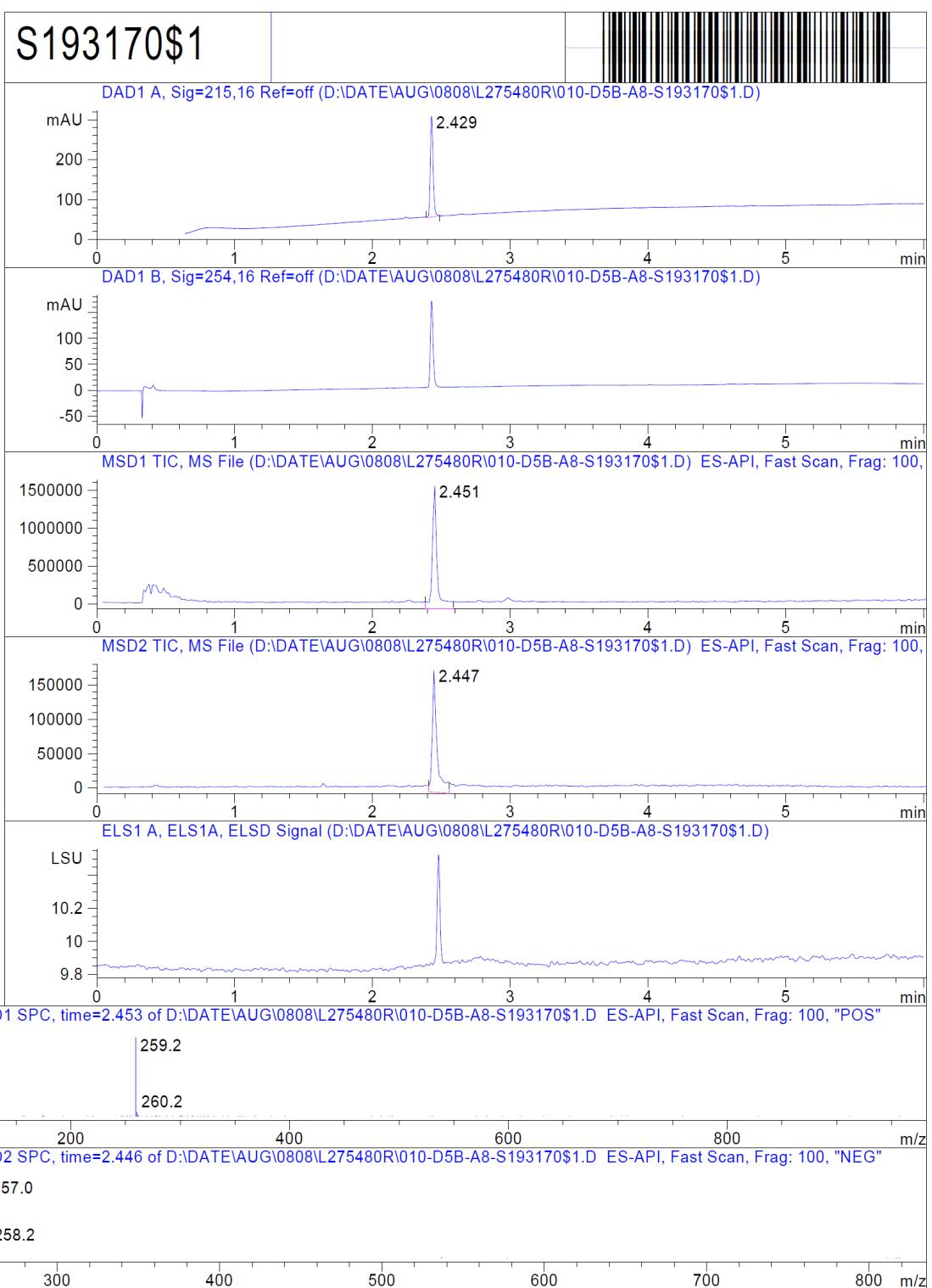


MaxPeak: 100.00%
Ret_Time: 2.429 min



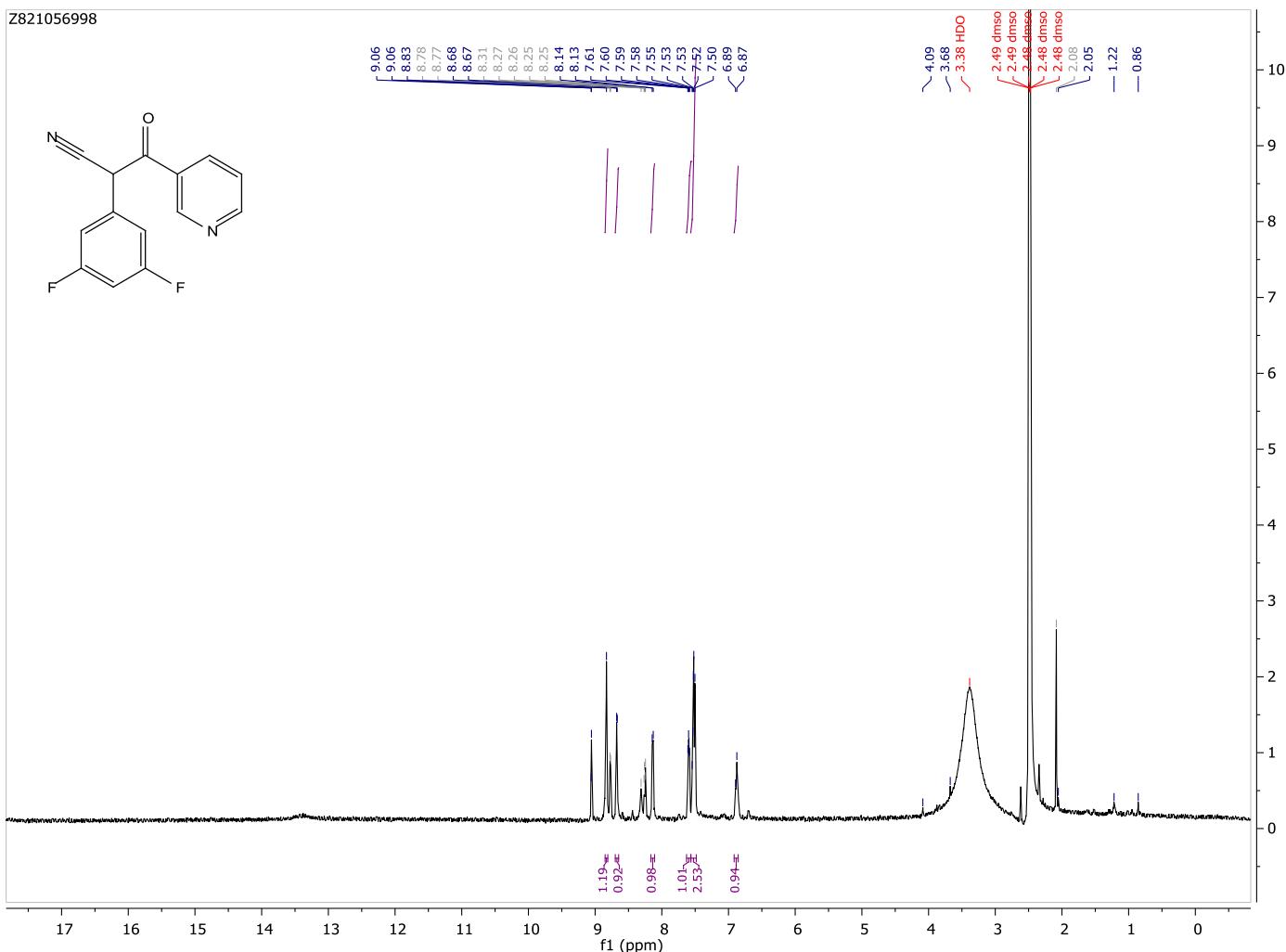
Mol Wt 258.22
Exact Mass 258.07
Time Area%

1 2.429 100.00

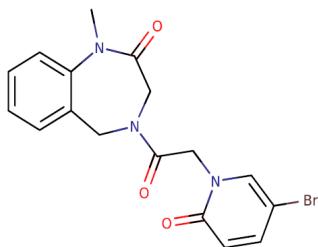


Z821056998

Z821056998

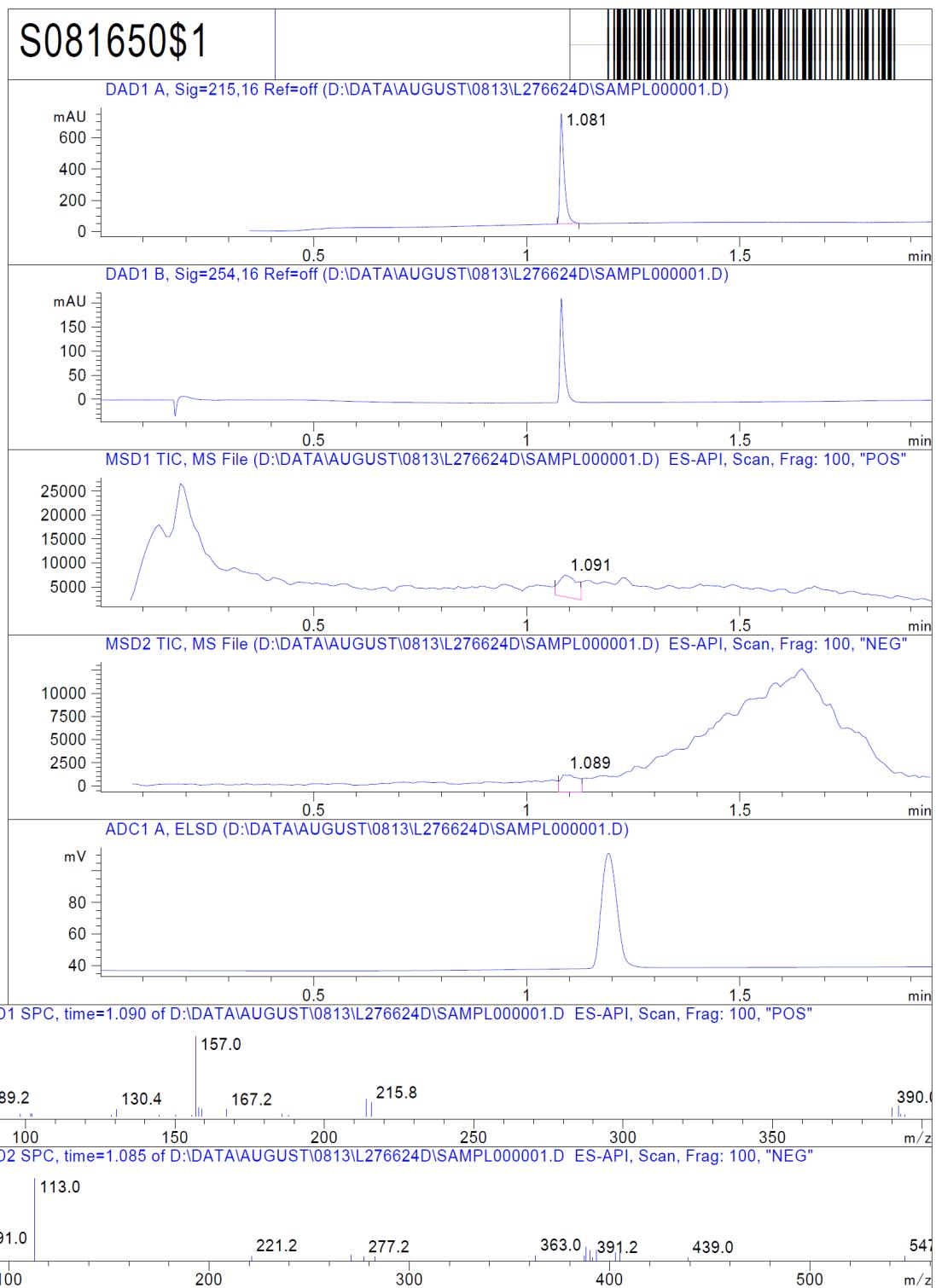


MaxPeak: 100.00%
Ret_Time: 1.081 min



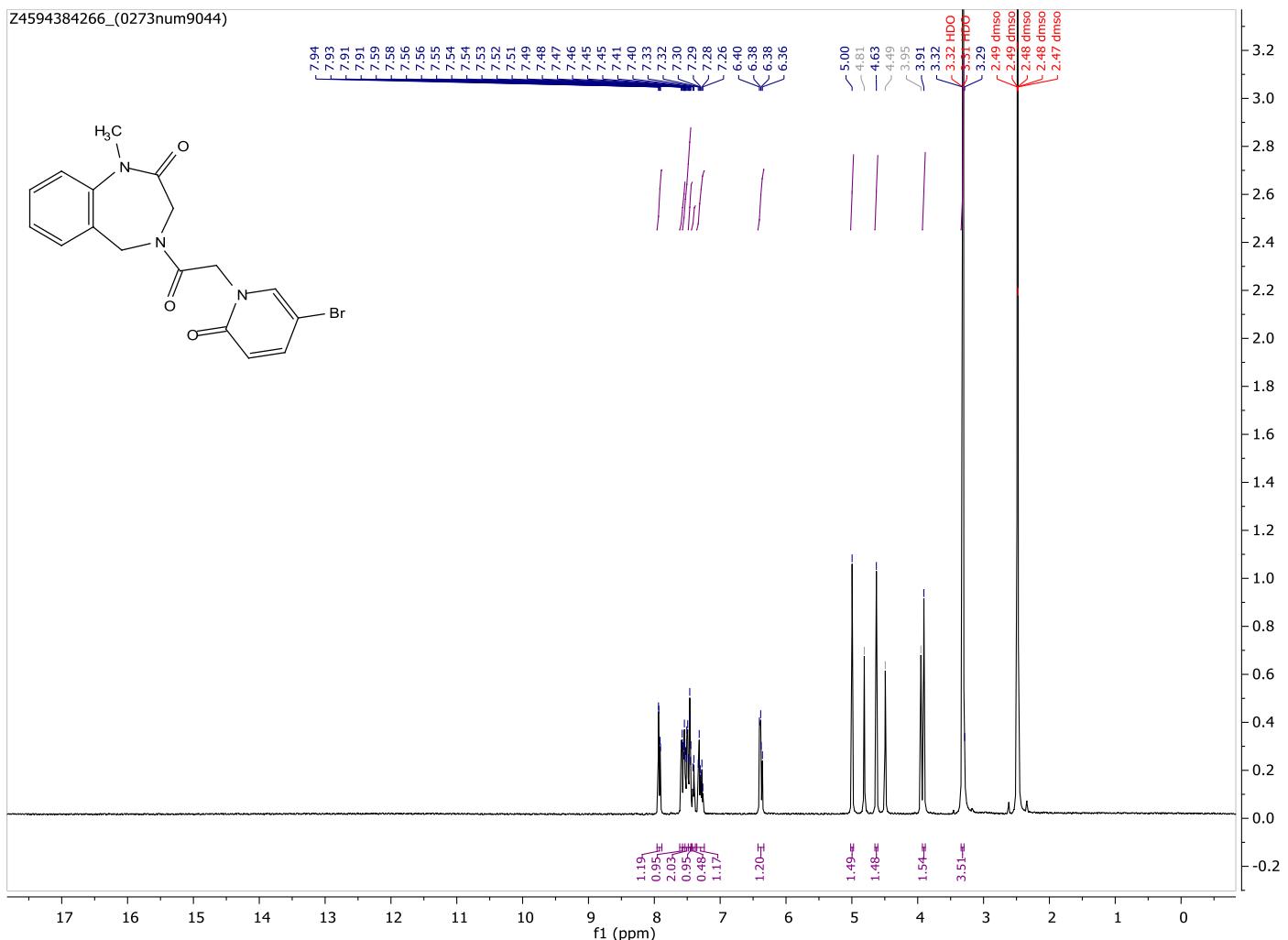
Mol Wt 390.23
Exact Mass 389.05

#	Time	Area%
1	1.081	100.00

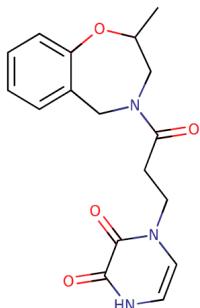


Z4594384266_(0273num9044)

Z4594384266_(0273num9044)

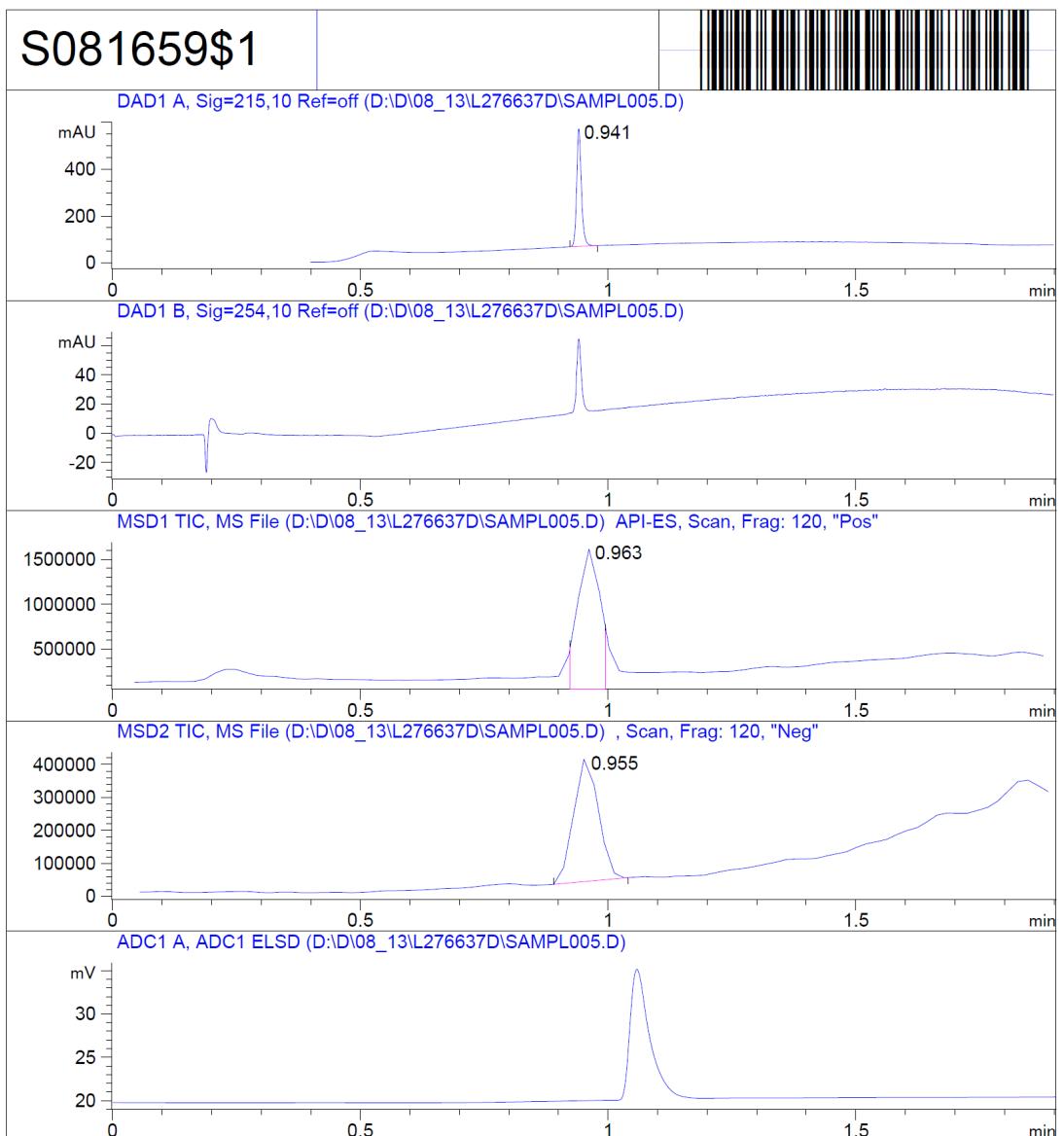


MaxPeak: 100.00%
Ret_Time: 0.941 min



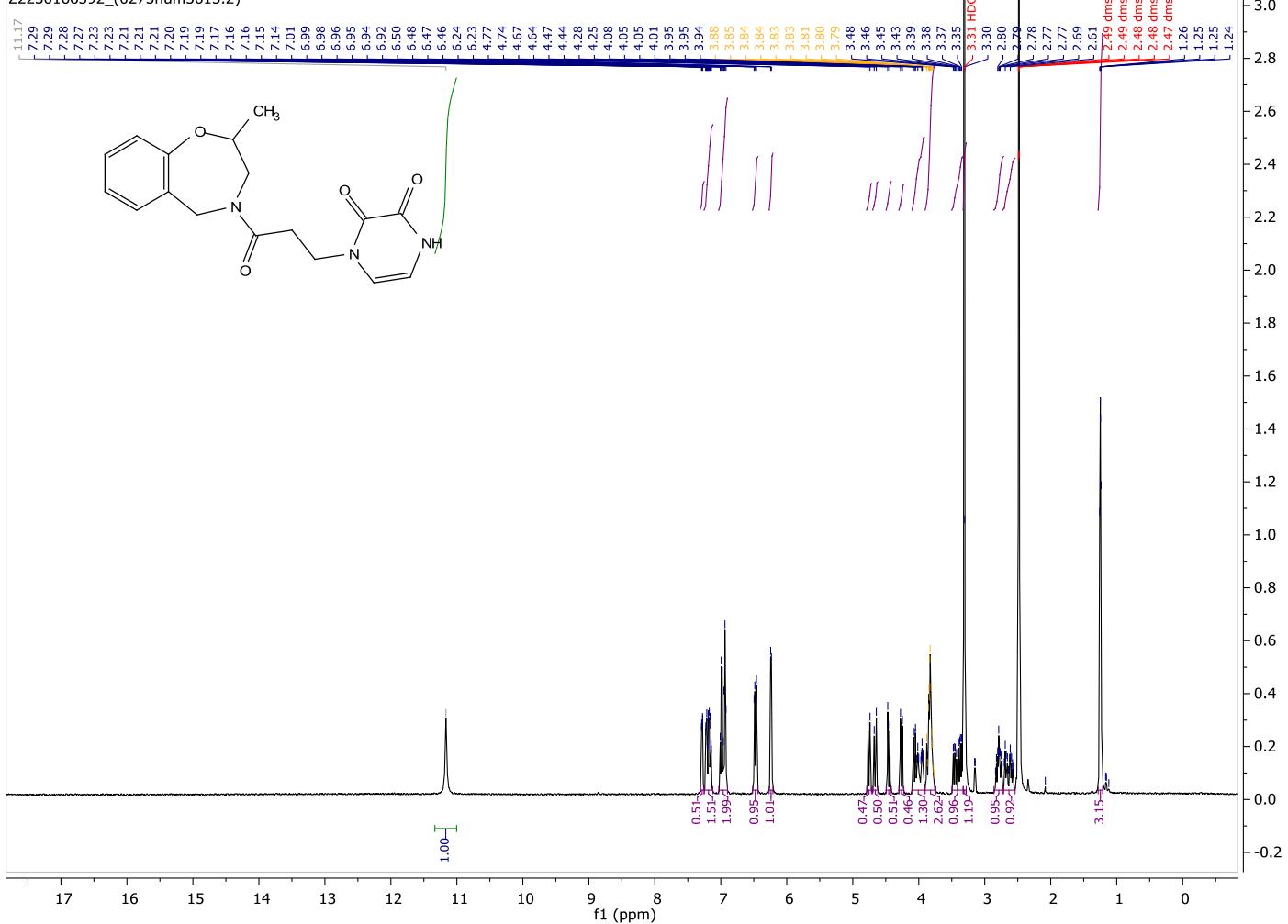
Mol Wt 329.35
Exact Mass 329.15
Time Area%

1 0.941 100.00

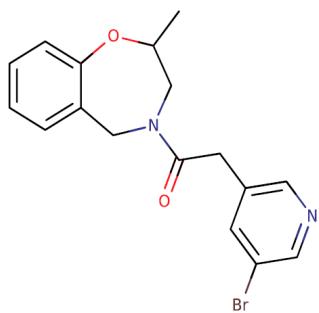


Z2230166392_(0273num3613.2)

Z2230166392_(0273num3613.2)



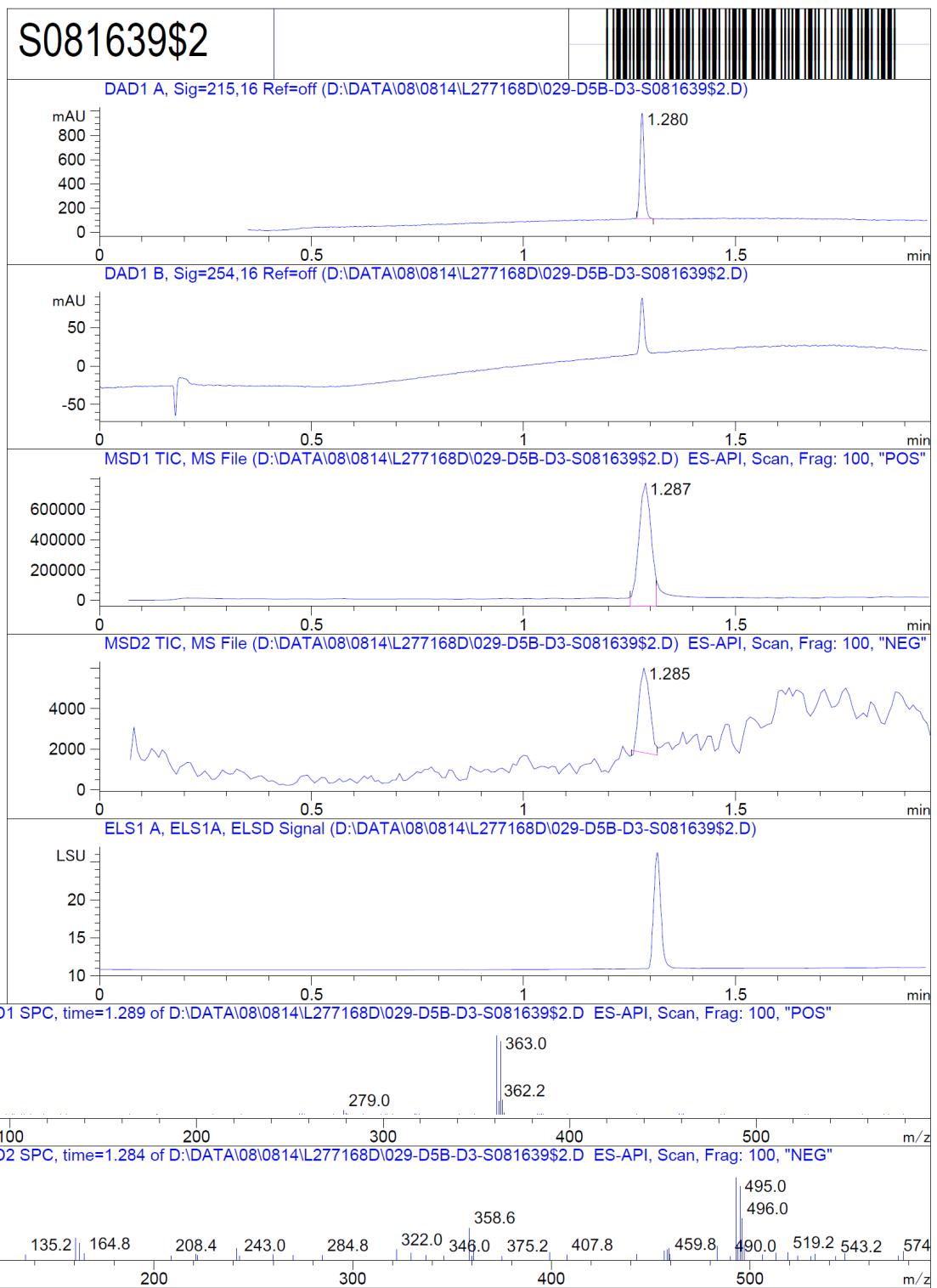
MaxPeak: 100.00%
Ret_Time: 1.280 min



Mol Wt 361.23

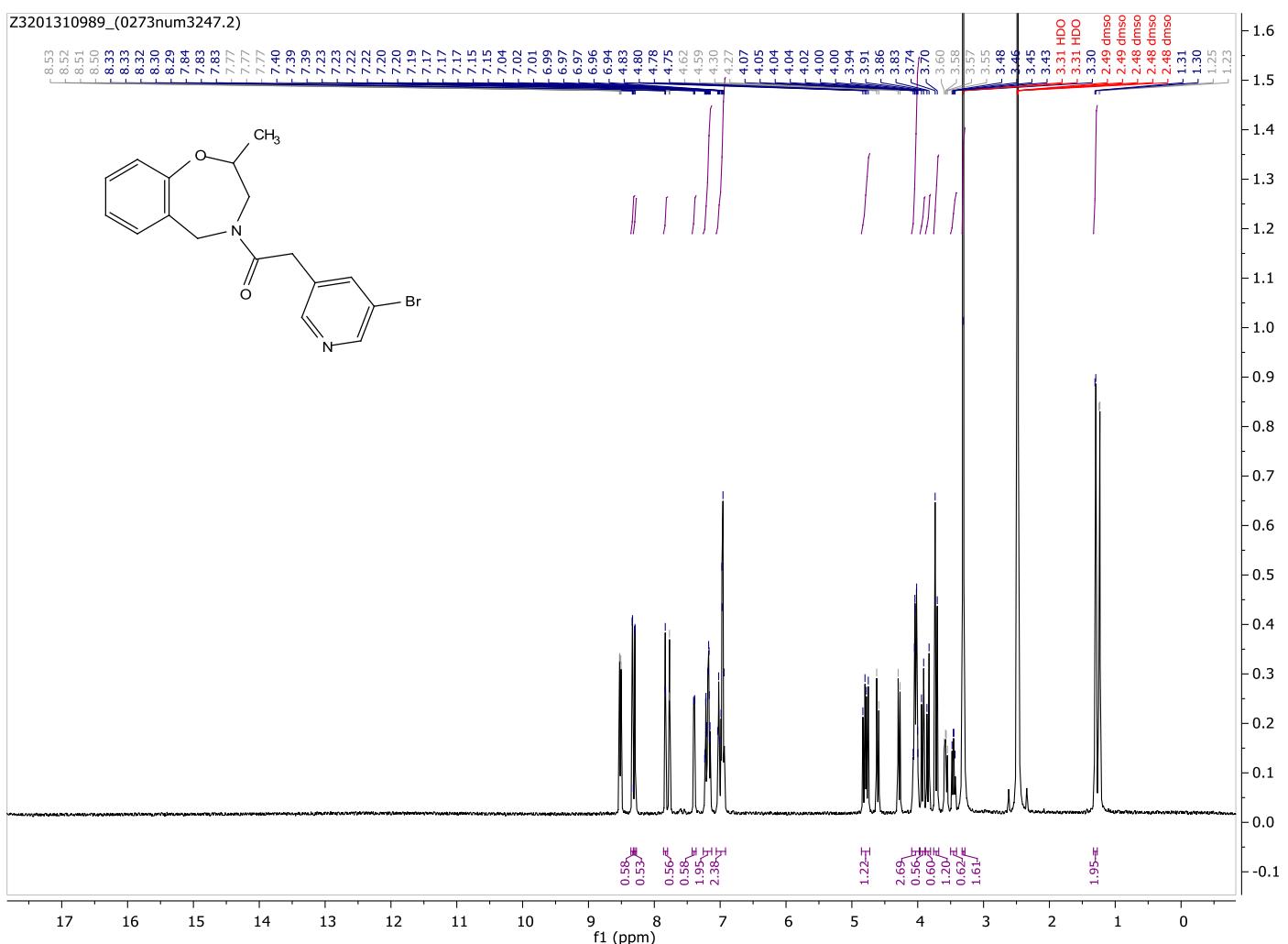
Exact Mass 360.07

#	Time	Area%
1	1.280	100.00

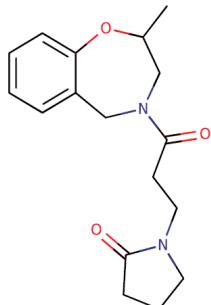


Z3201310989_(0273num3247.2)

Z3201310989_(0273num3247.2)



MaxPeak: 100.00%
Ret_Time: 1.122 min

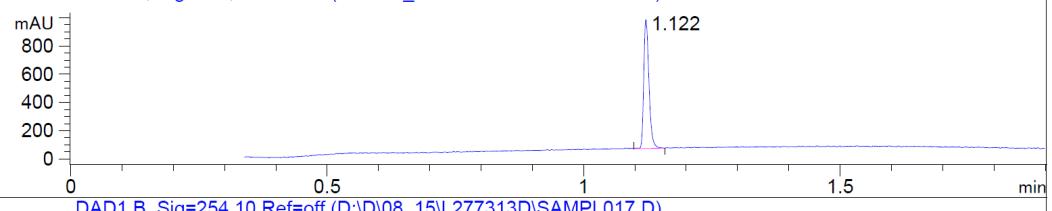


Mol Wt 302.37
Exact Mass 302.19
Time Area%

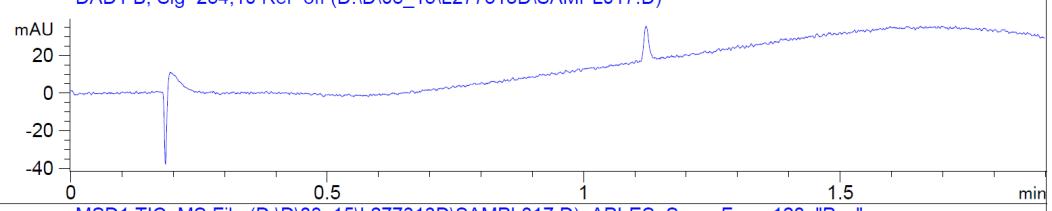
1 1.122 100.00

S081643\$1

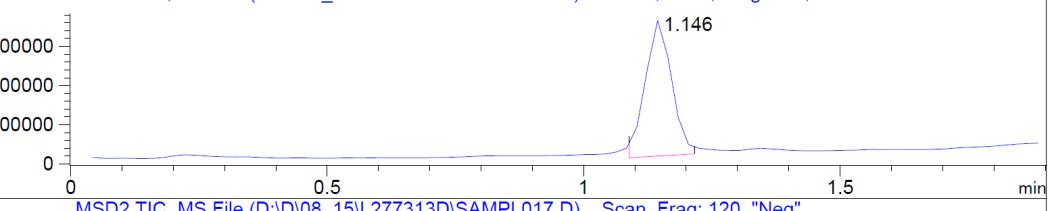
DAD A, Sig=215,10 Ref=off (D:\D\08_15\L277313D\SAMPL017.D)



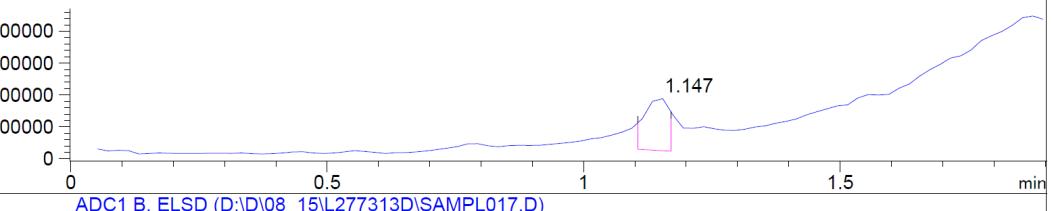
DAD B, Sig=254,10 Ref=off (D:\D\08_15\L277313D\SAMPL017.D)



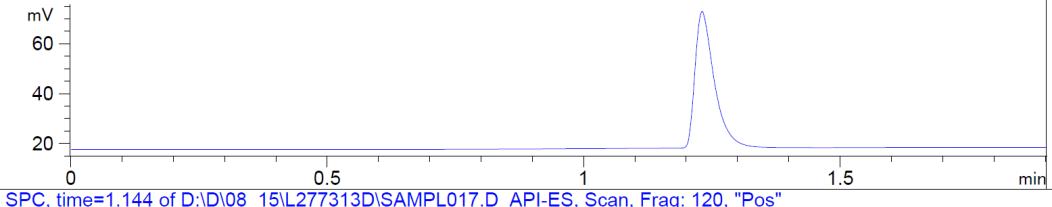
MSD1 TIC, MS File (D:\D\08_15\L277313D\SAMPL017.D) API-ES, Scan, Frag: 120, "Pos"



MSD2 TIC, MS File (D:\D\08_15\L277313D\SAMPL017.D) , Scan, Frag: 120, "Neg"

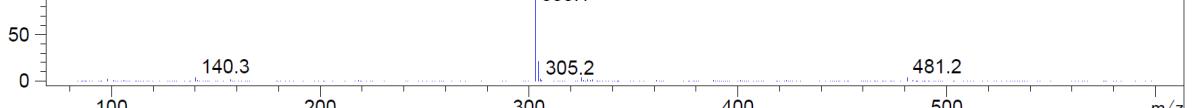


ADC1 B, ELSD (D:\D\08_15\L277313D\SAMPL017.D)

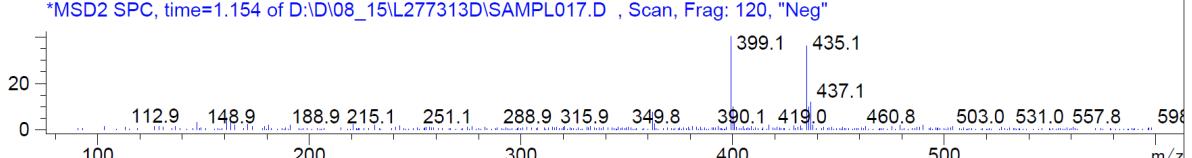


*MSD1 SPC, time=1.144 of D:\D\08_15\L277313D\SAMPL017.D API-ES, Scan, Frag: 120, "Pos"

RT 1.146

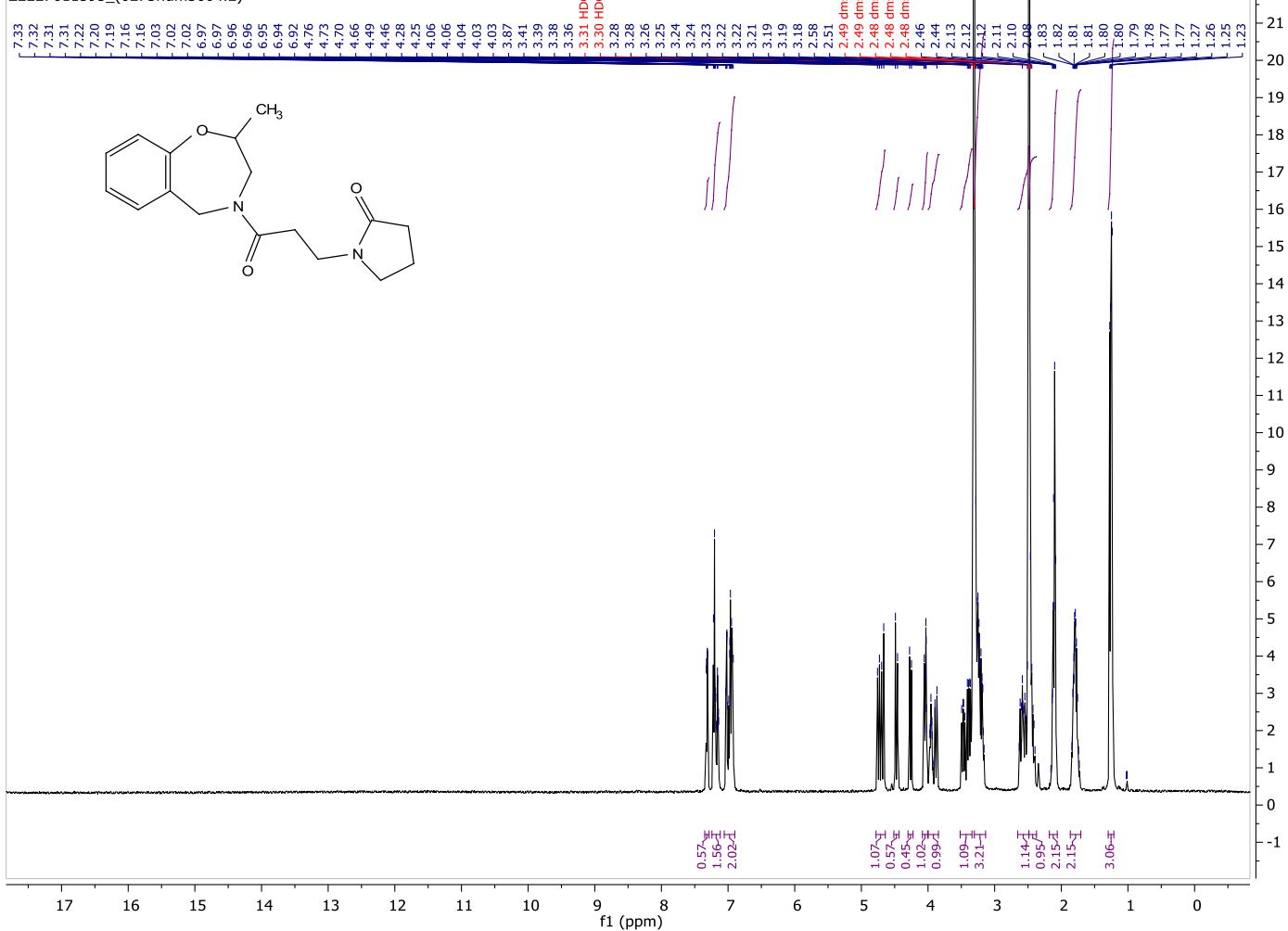


RT 1.147

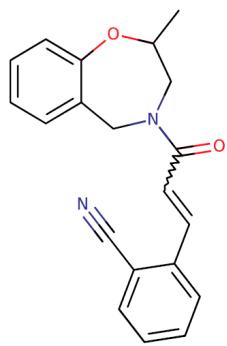


Z2227611595_(0273num3604.2)

Z2227611595_(0273num3604.2)

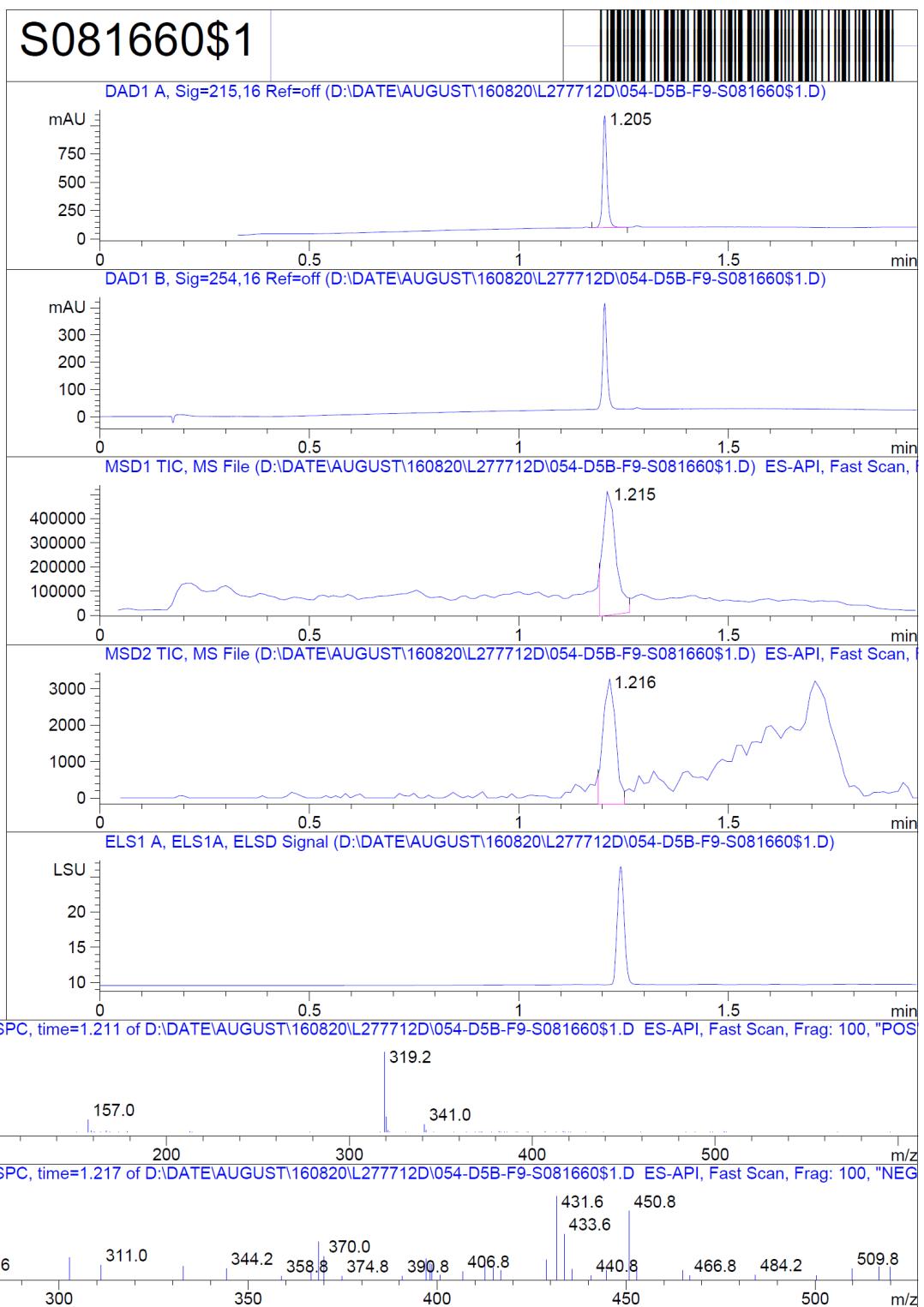


MaxPeak: 100.00%
Ret_Time: 1.205 min



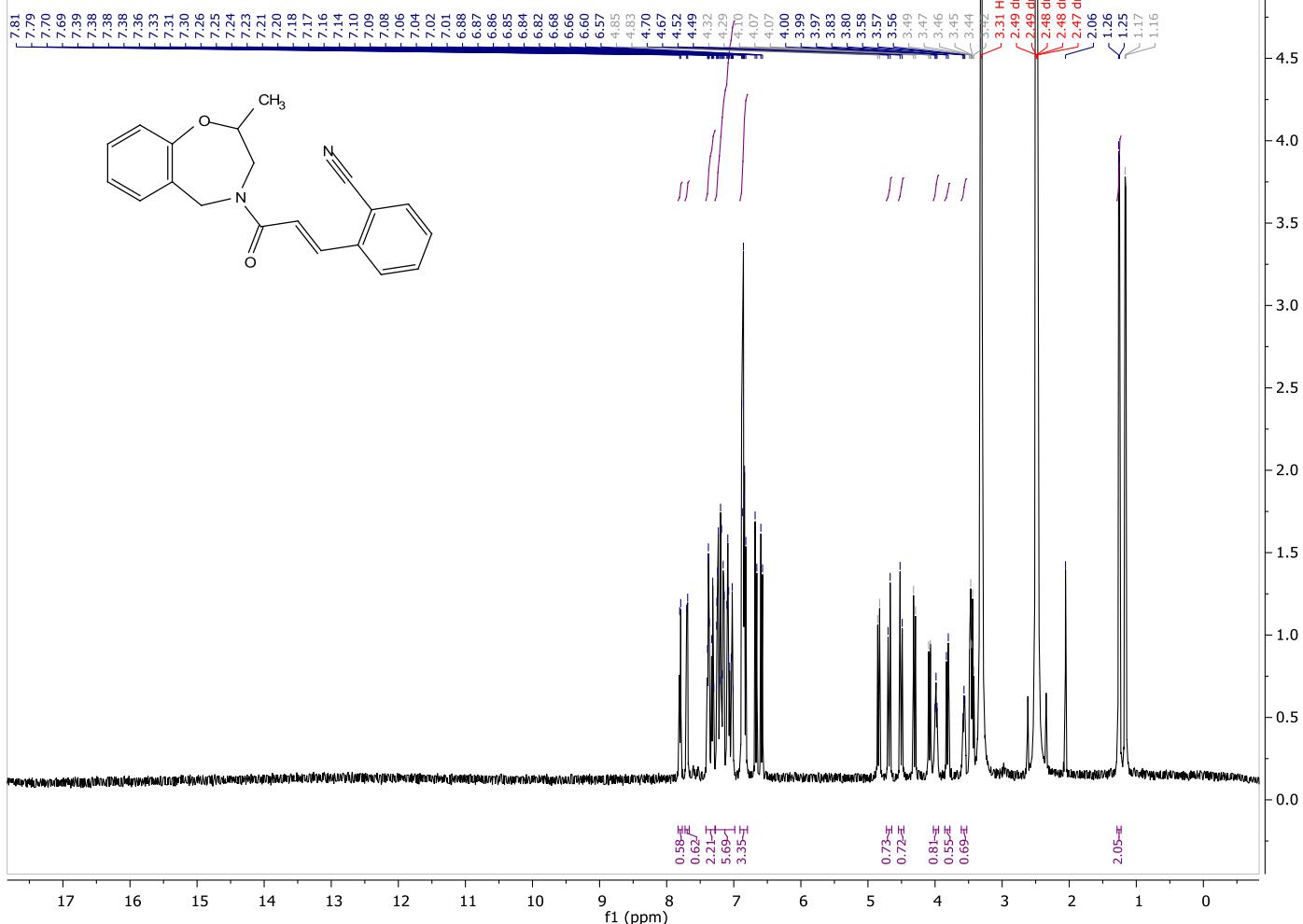
Mol Wt 318.37
Exact Mass 318.16
Time Area%

1 1.205 100.00

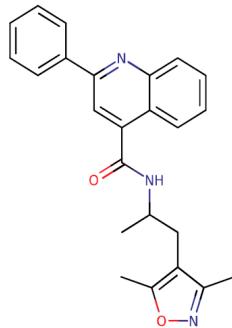


Z2230172883_(0273num3343.2)

Z2230172883_(0273num3343.2)

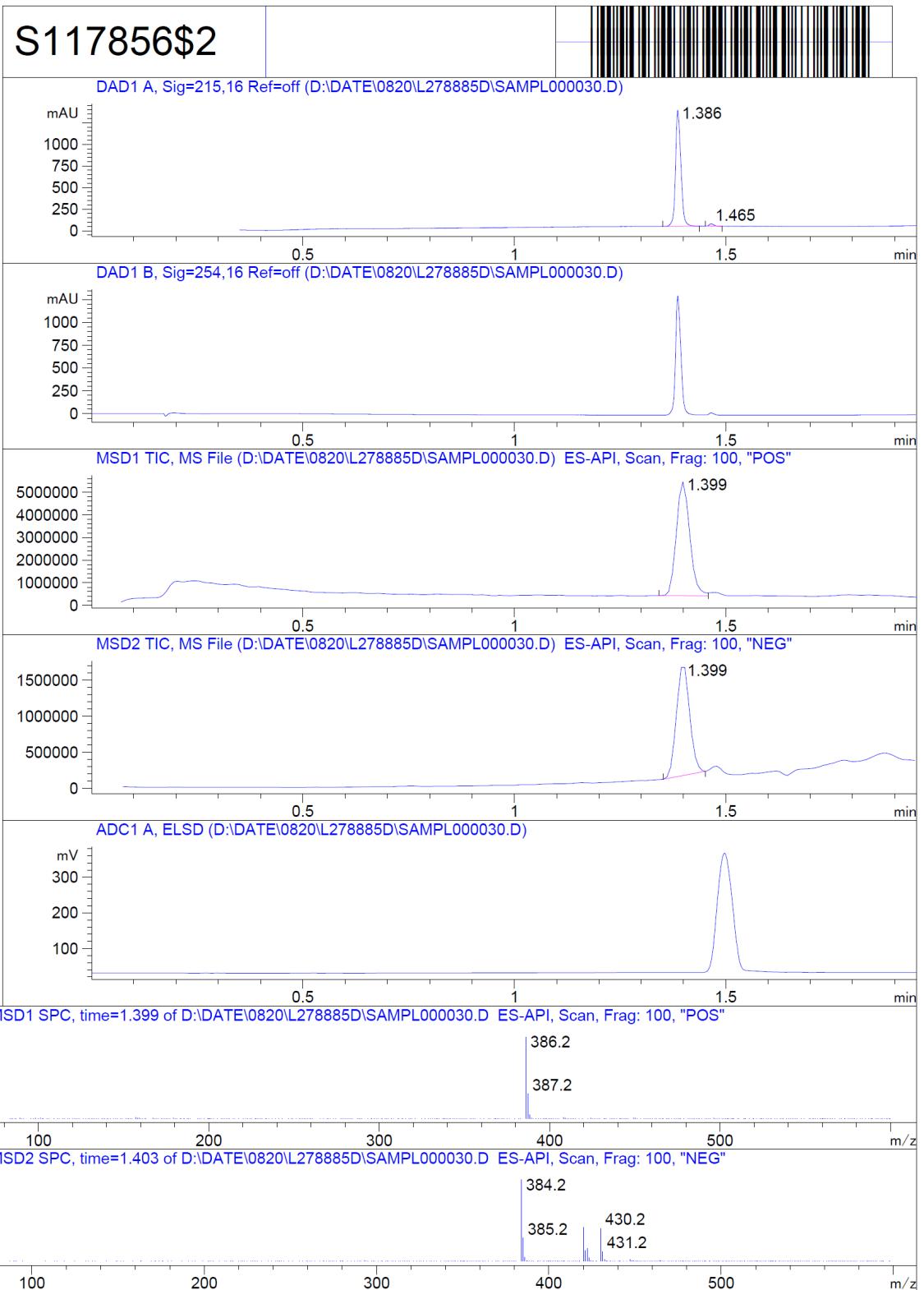


MaxPeak: 98.21%
Ret_Time: 1.386 min



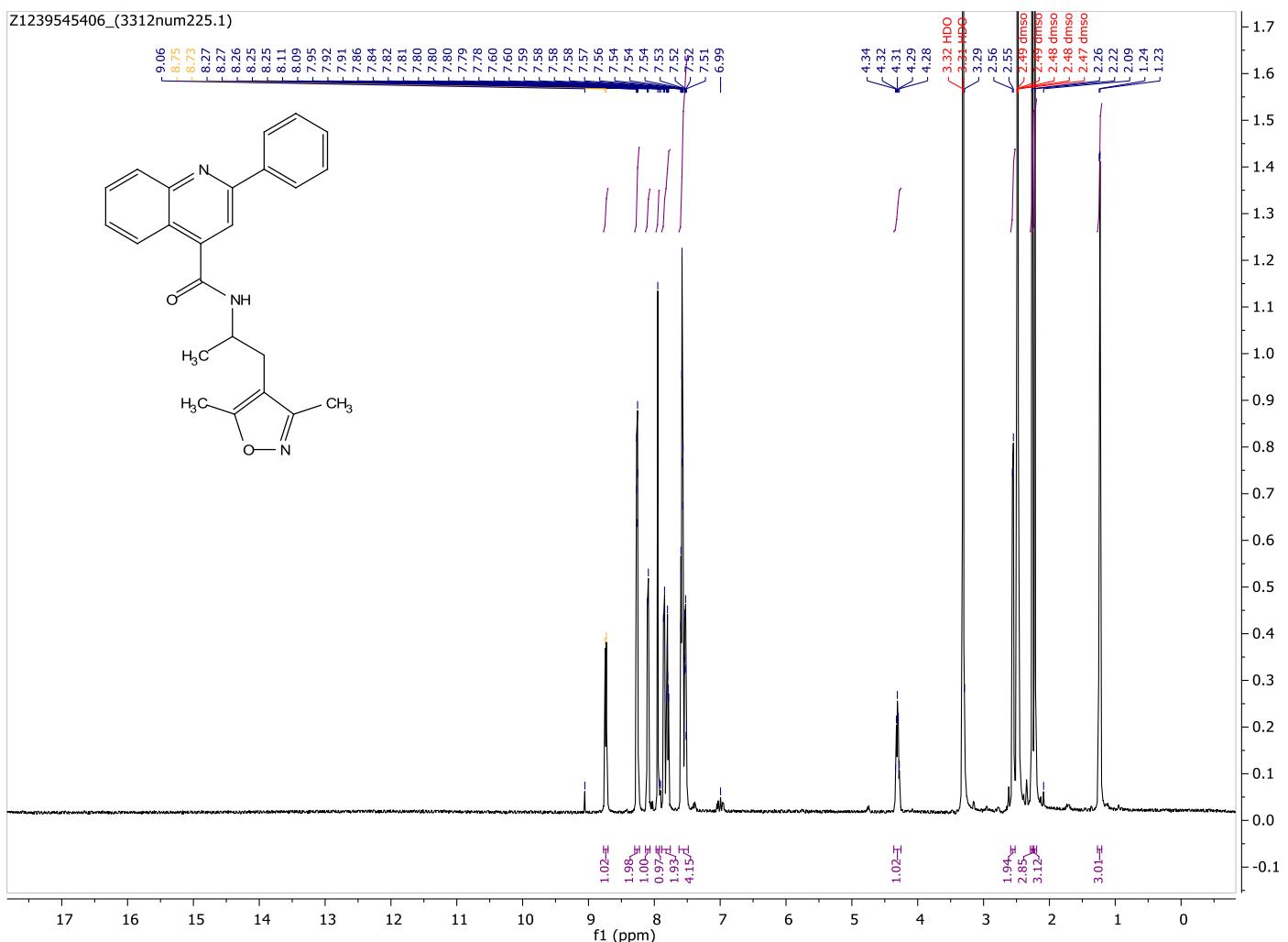
Mol Wt 385.46
Exact Mass 385.21

#	Time	Area%
1	1.386	98.21
2	1.465	1.79

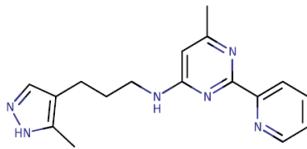


Z1239545406_(3312num225.1)

Z1239545406_(3312num225.1)

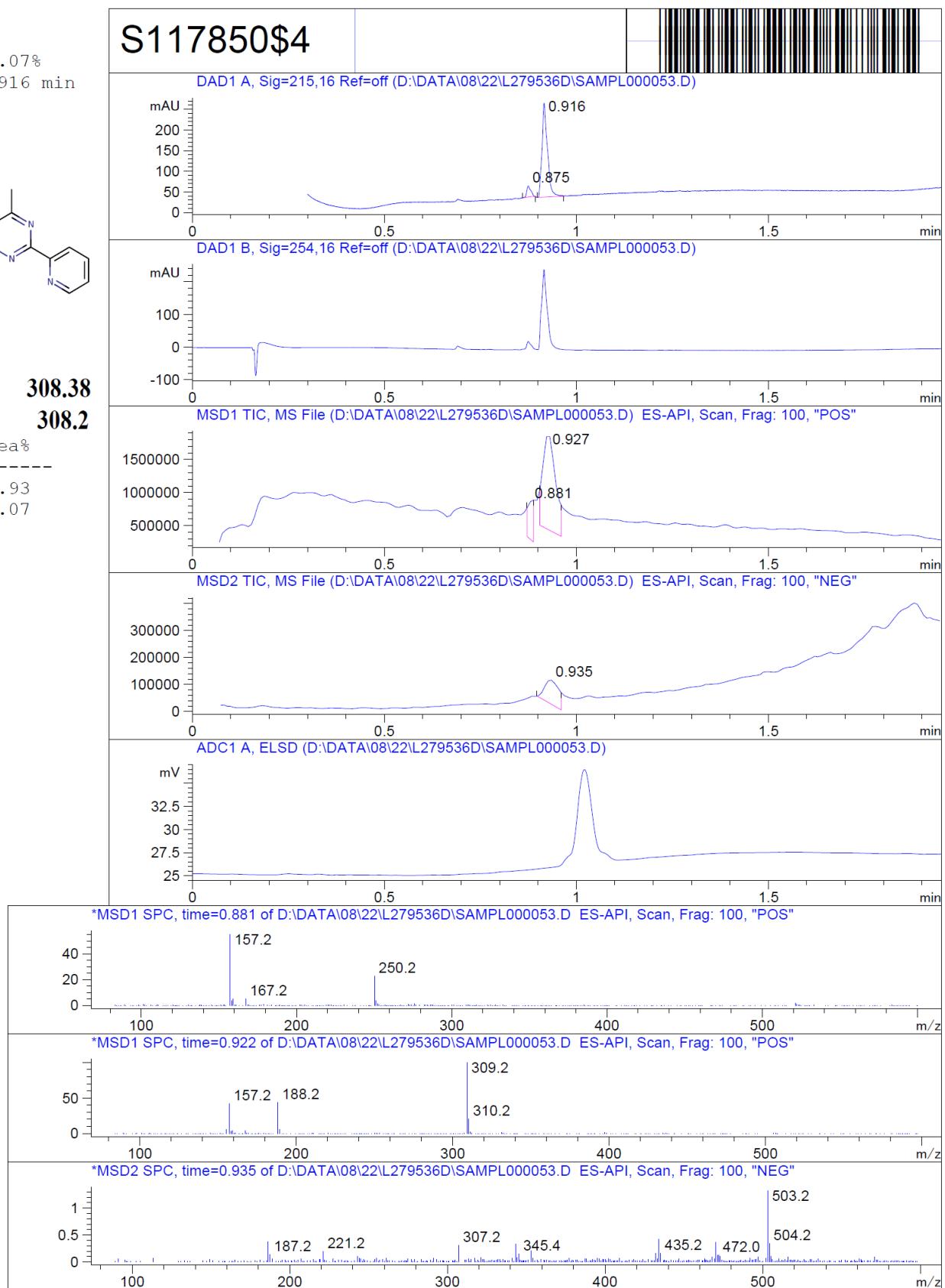


MaxPeak: 92.07%
Ret_Time: 0.916 min

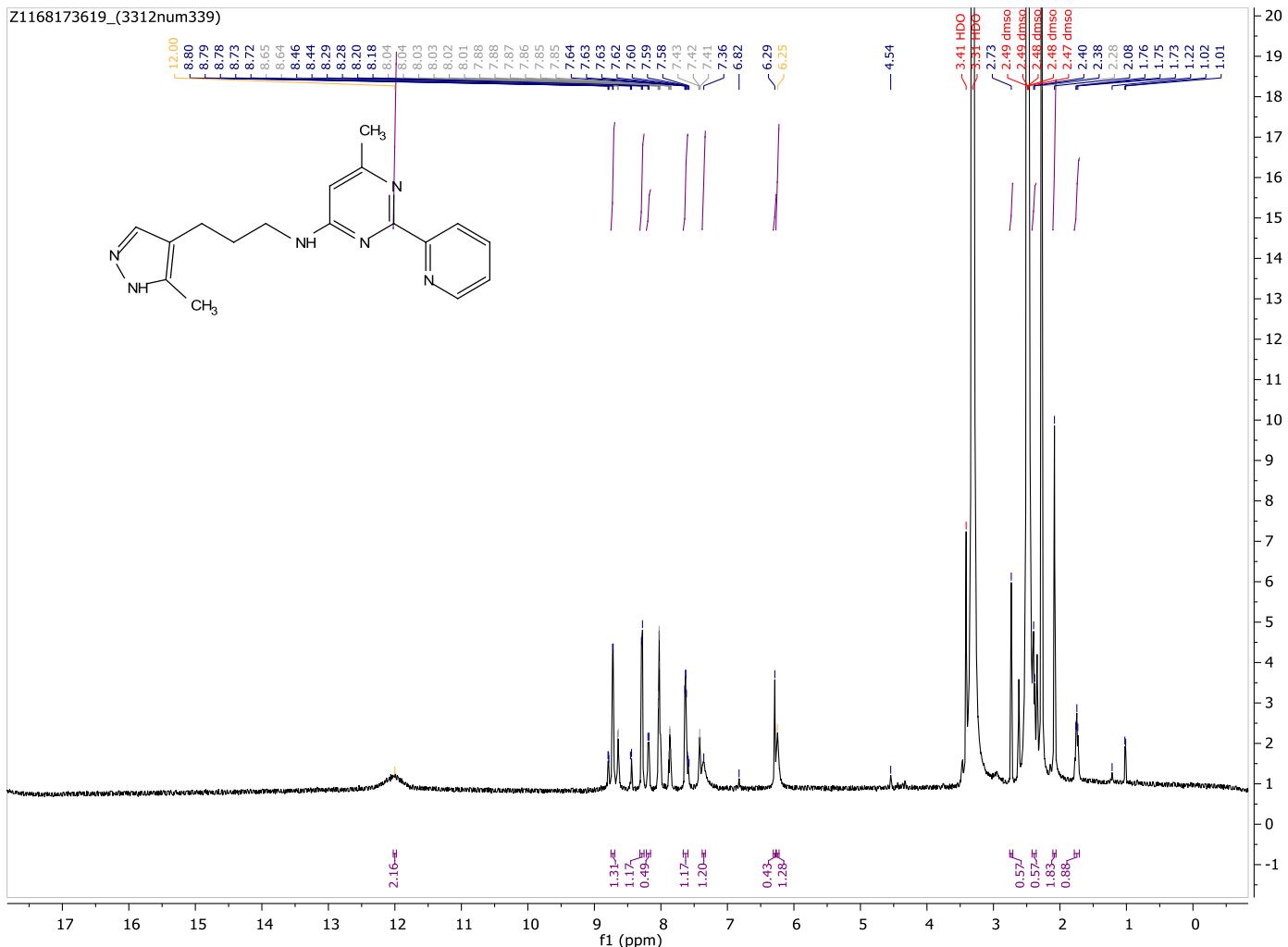


Mol Wt 308.38
Exact Mass 308.2
Time Area%

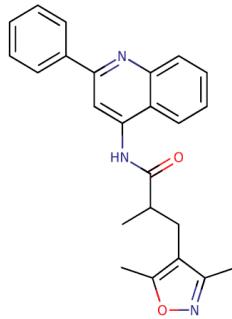
1 0.875 7.93
2 0.916 92.07



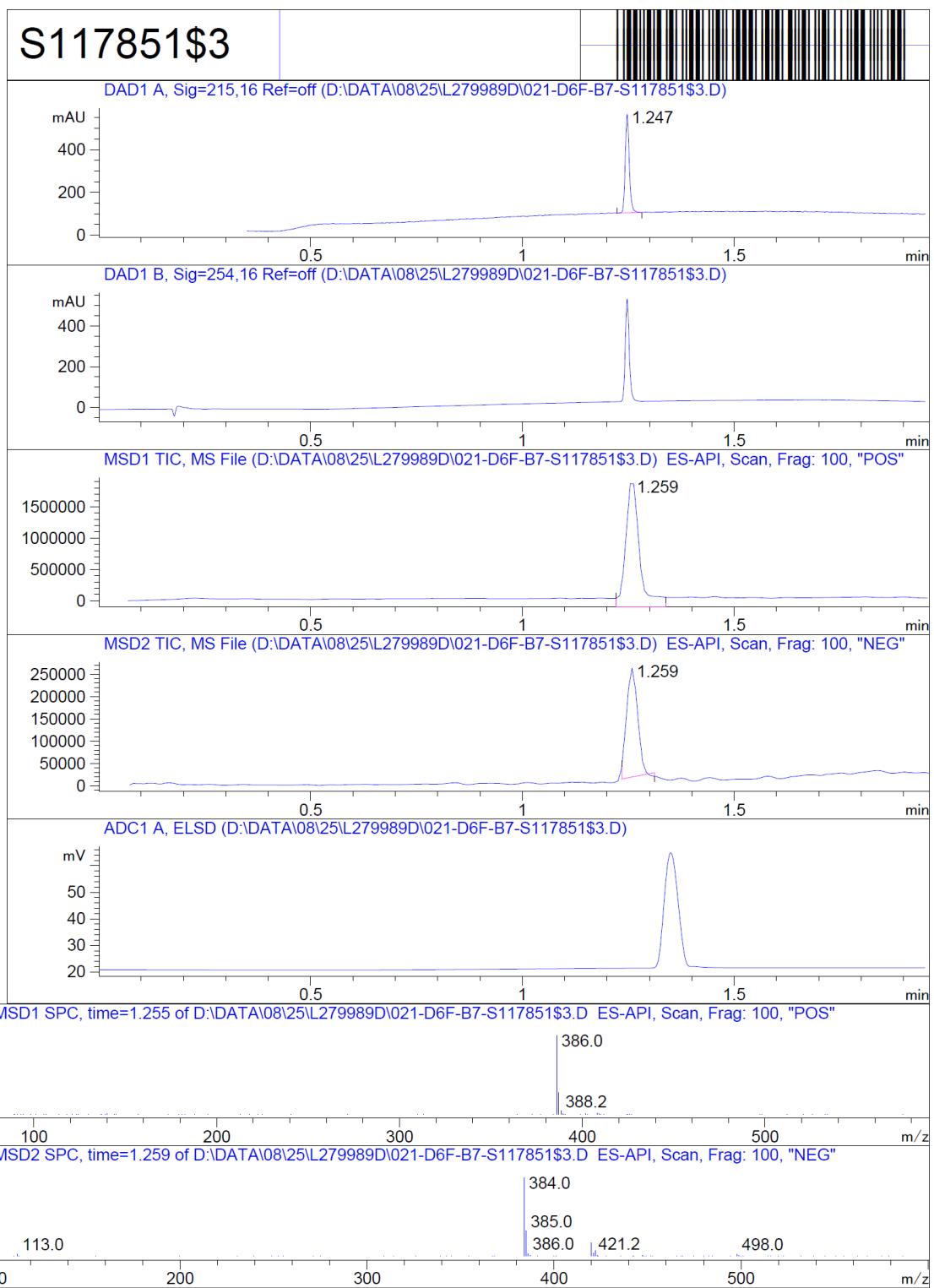
Z1168173619_(3312num339)



MaxPeak: 100.00%
Ret_Time: 1.247 min

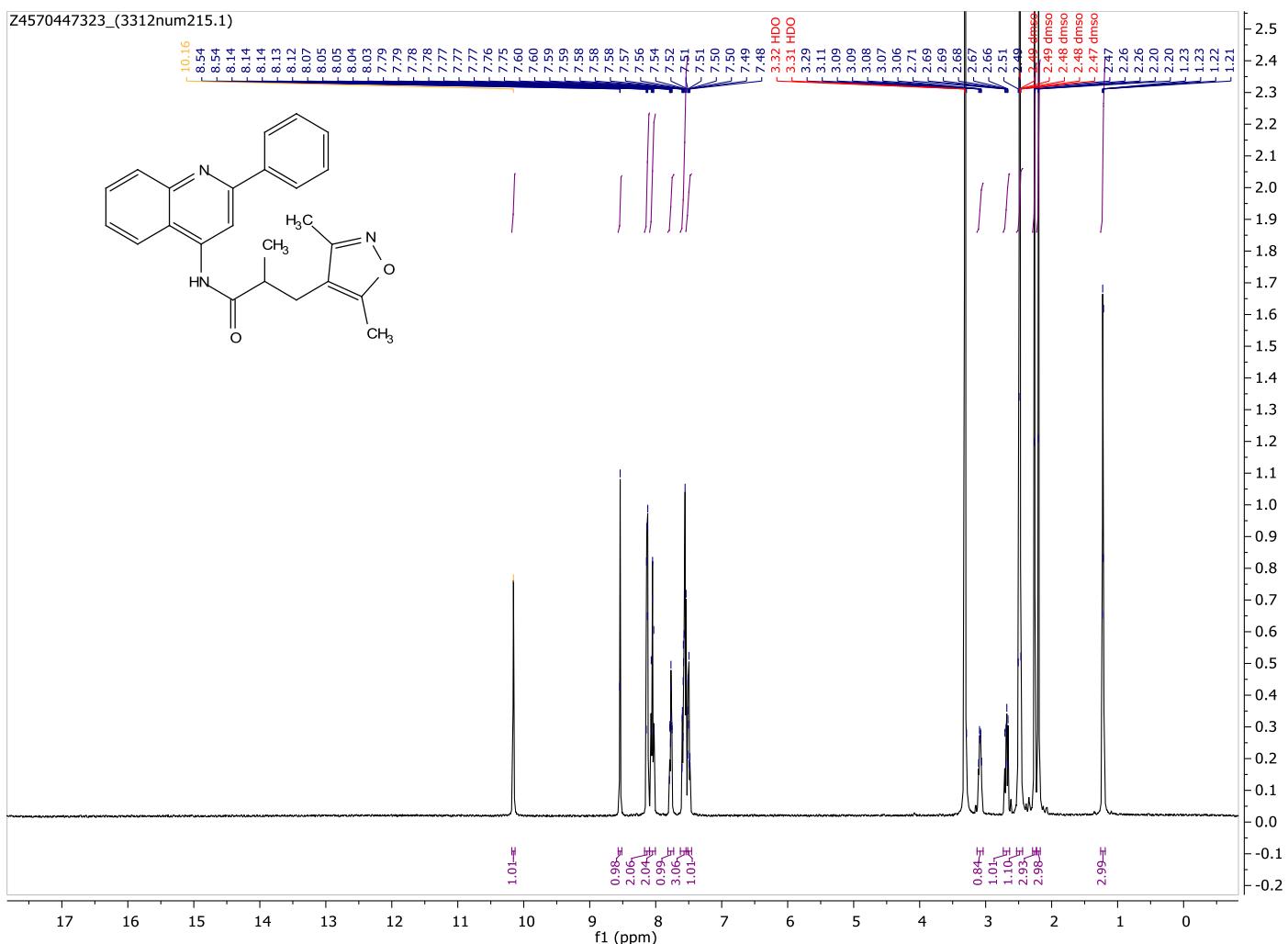


Mol Wt 385.46
Exact Mass 385.21
Time Area%
1 1.247 100.00

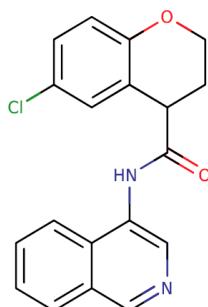


Z4570447323_(3312num215.1)

Z4570447323_(3312num215.1)

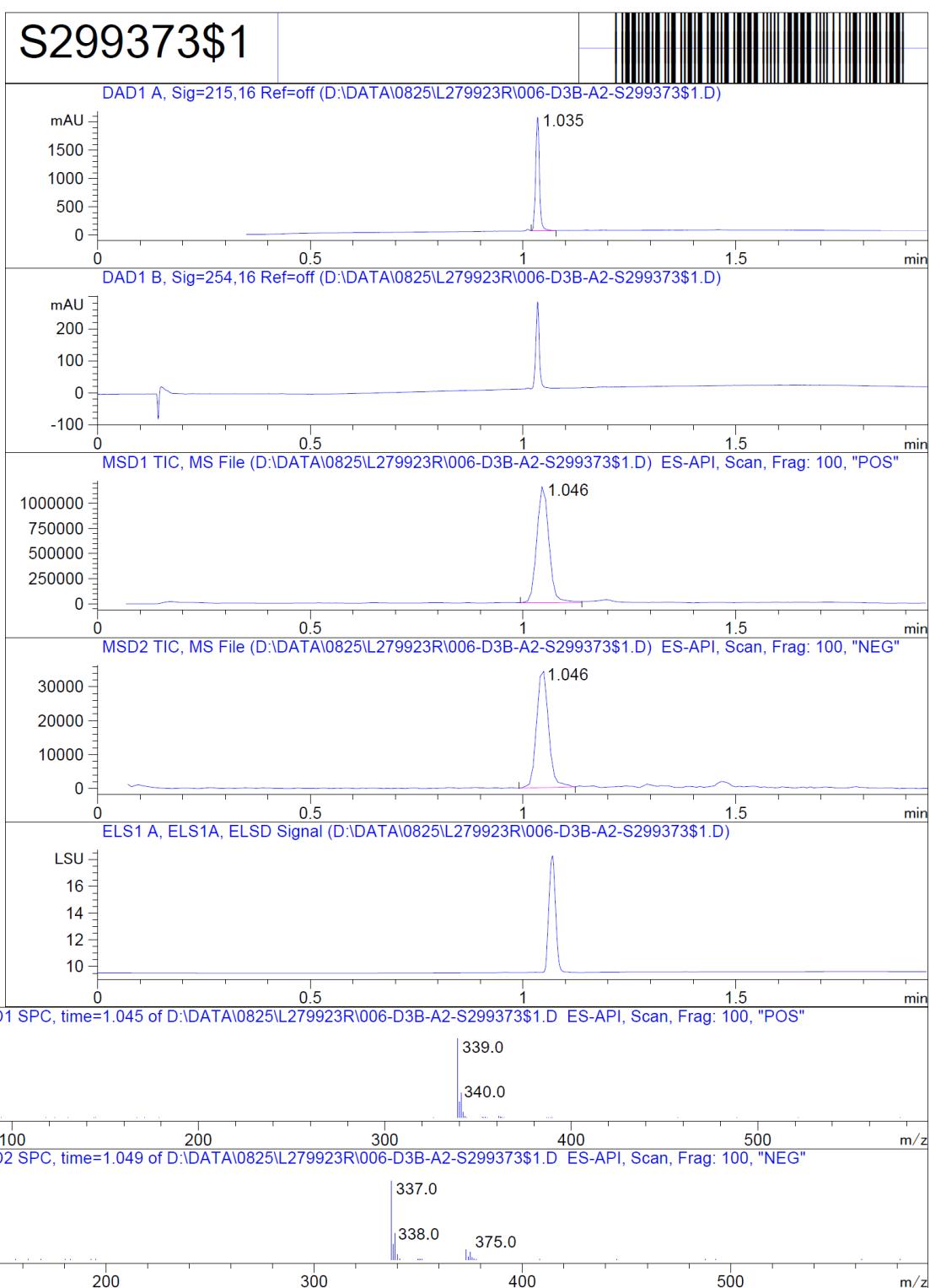


MaxPeak: 100.00%
Ret_Time: 1.035 min



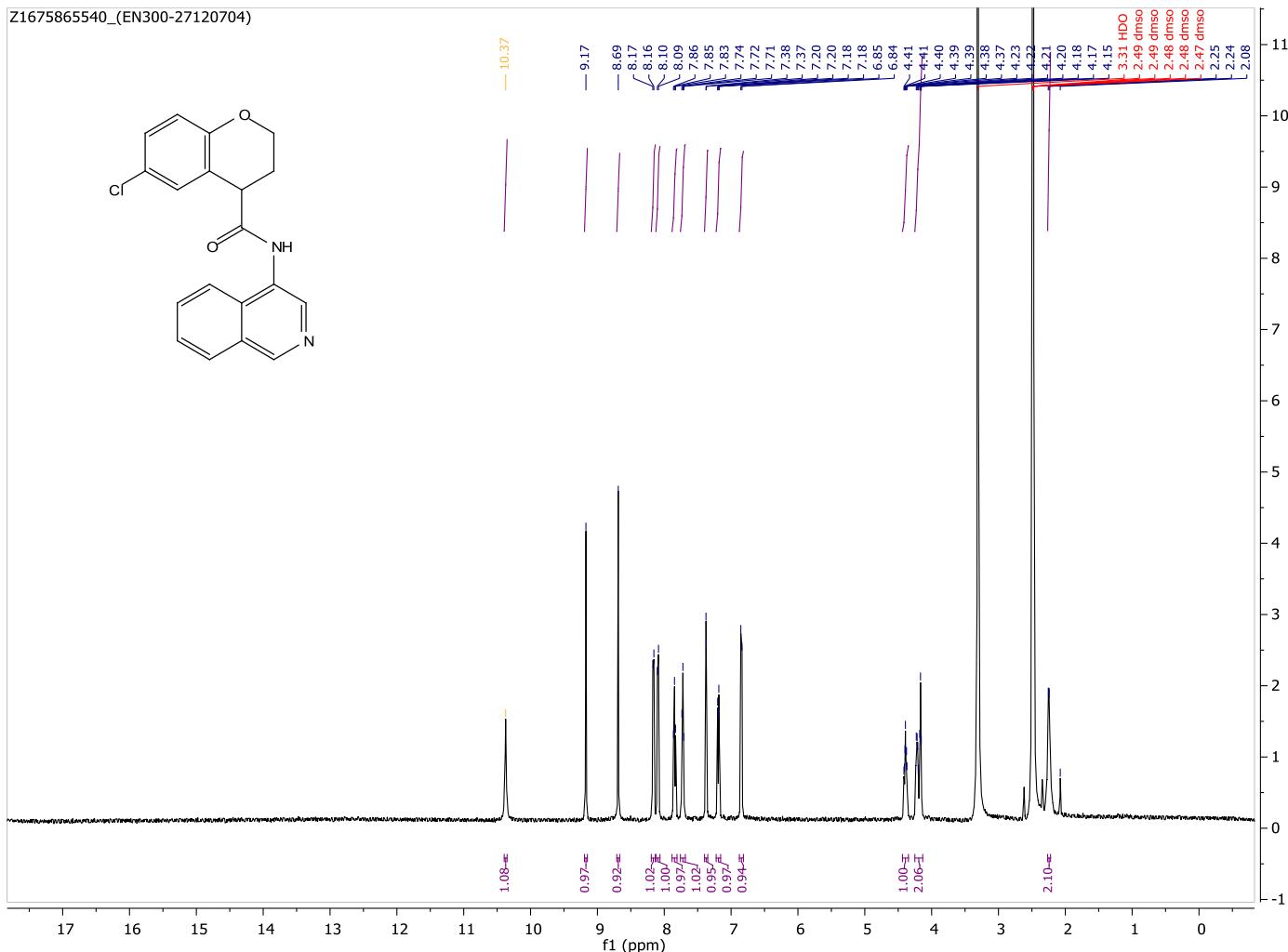
Mol Wt 338.79
Exact Mass 338.1
Time Area%

1 1.035 100.00

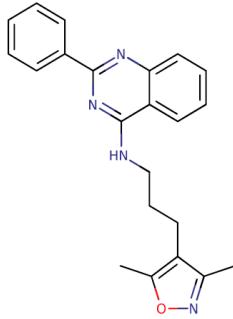


Z1675865540_(EN300-27120704)

Z1675865540_(EN300-27120704)

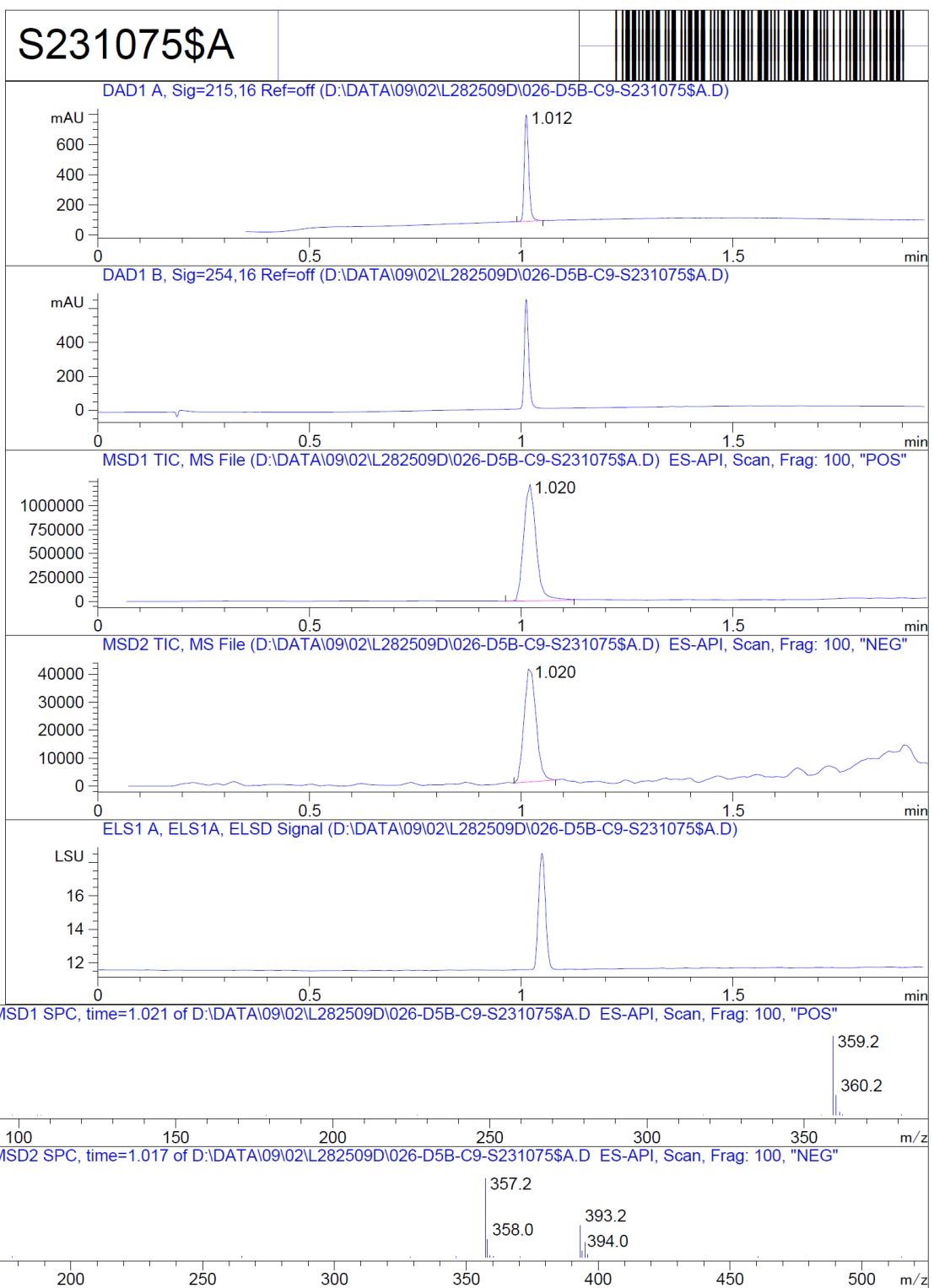


MaxPeak: 100.00%
Ret_Time: 1.012 min



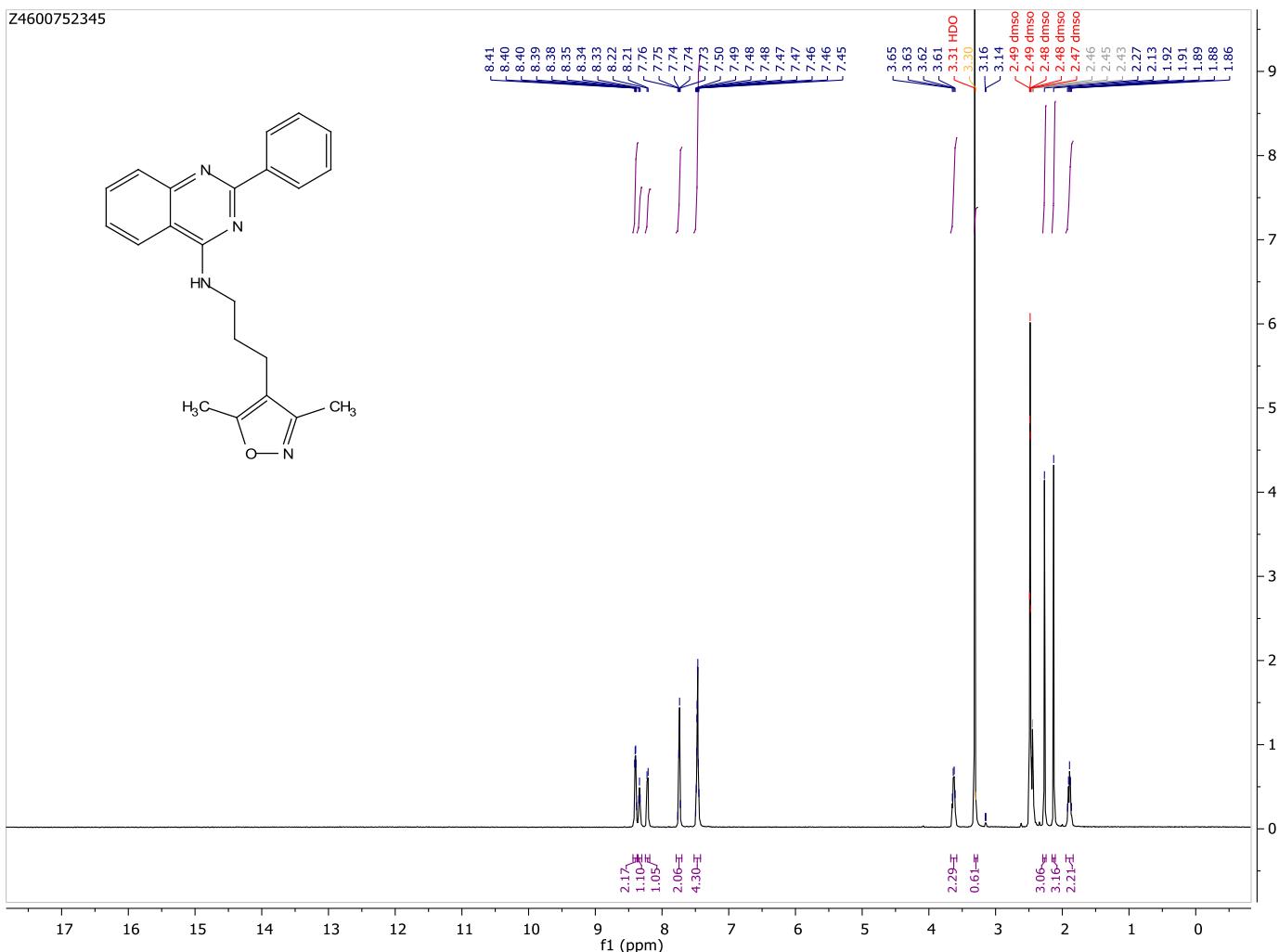
Mol Wt 358.44
Exact Mass 358.21

#	Time	Area%
1	1.012	100.00

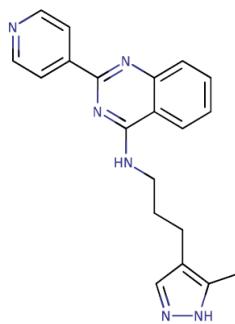


Z4600752345

Z4600752345

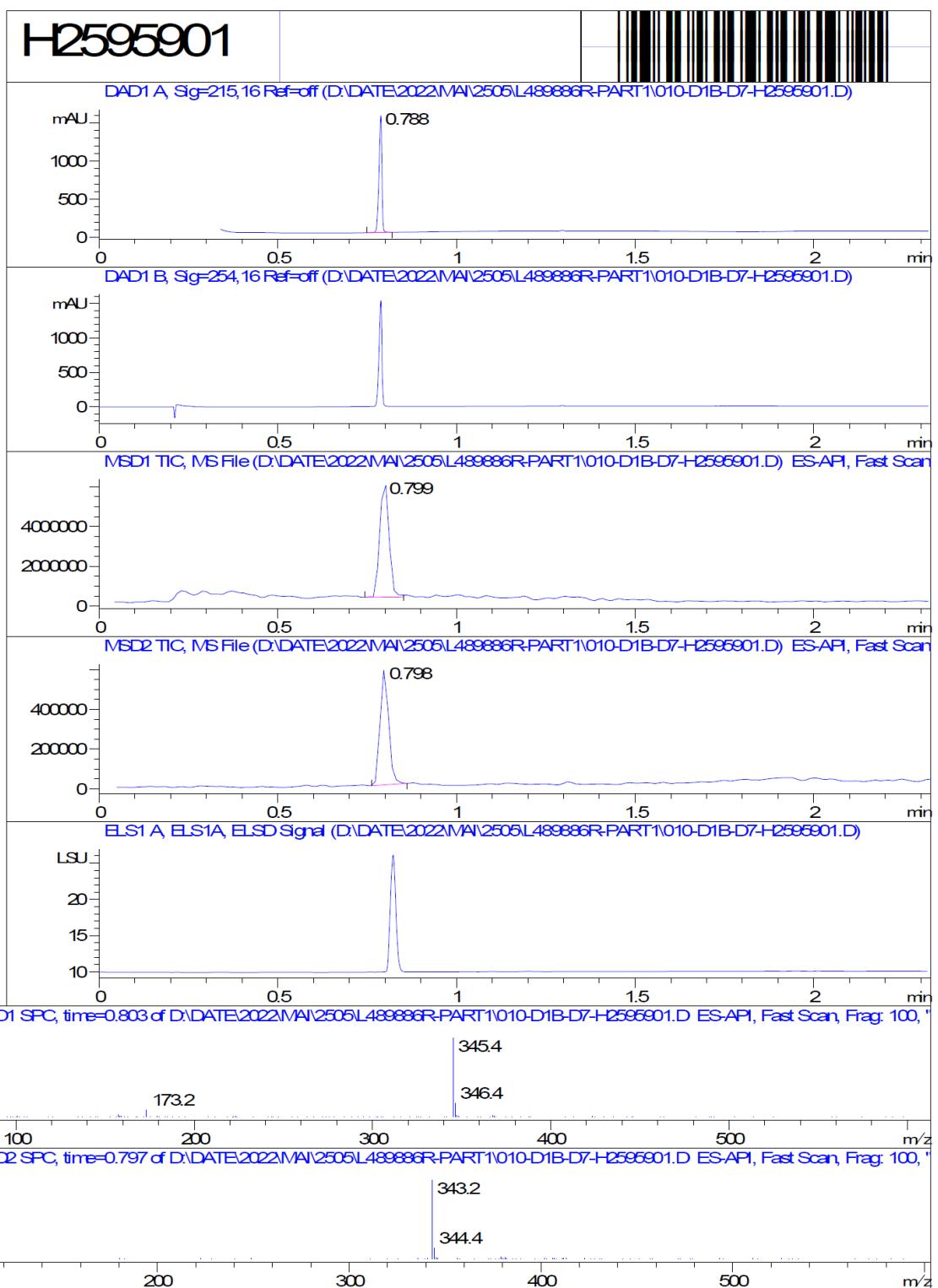


MaxPeak: 100.00%
Ret_Time: 0.788 min



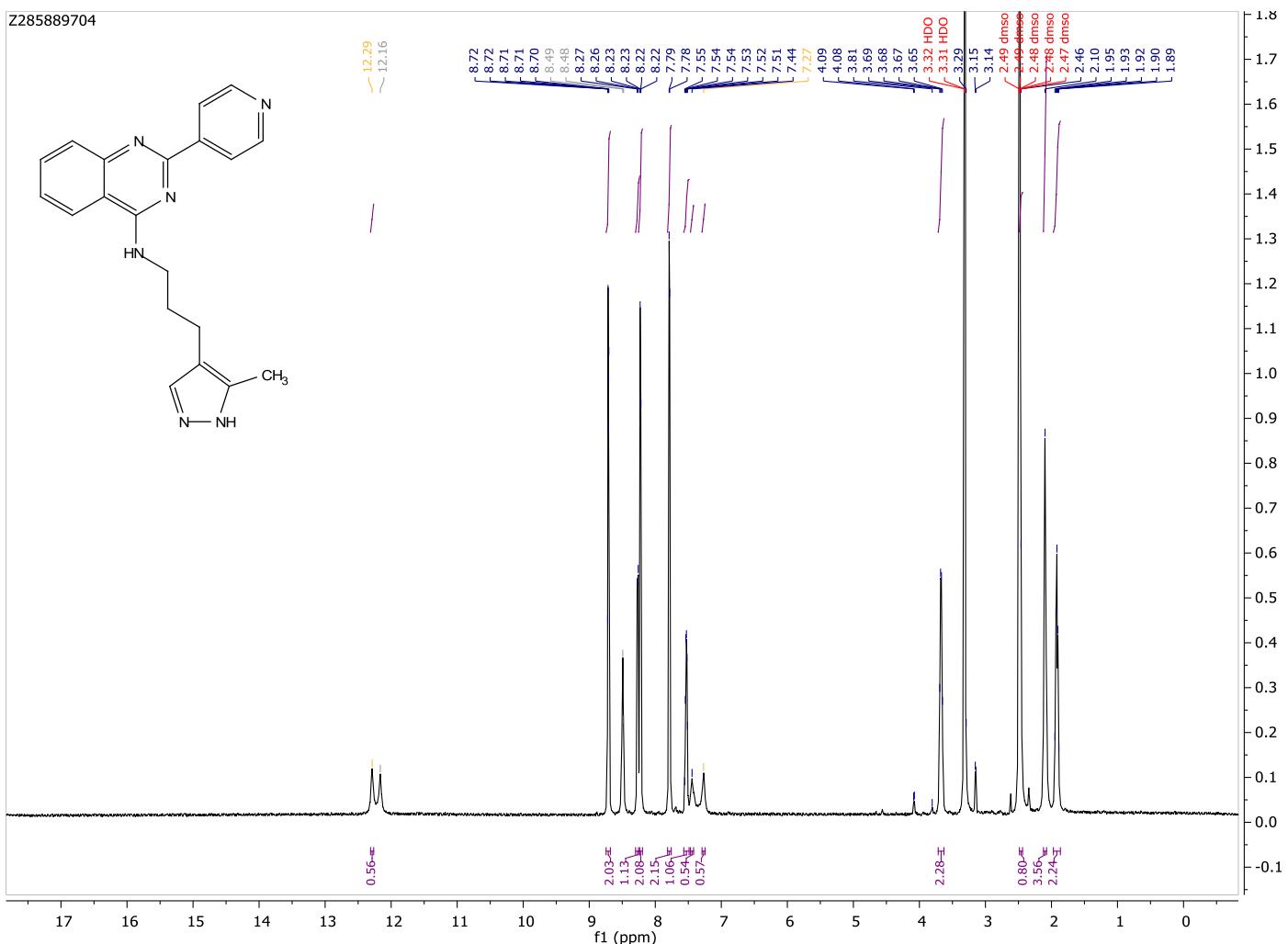
Mol Wt 344.41
Exact Mass 344.2

#	Time	Area%
1	0.788	100.00

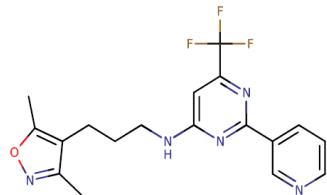


Z285889704

Z285889704

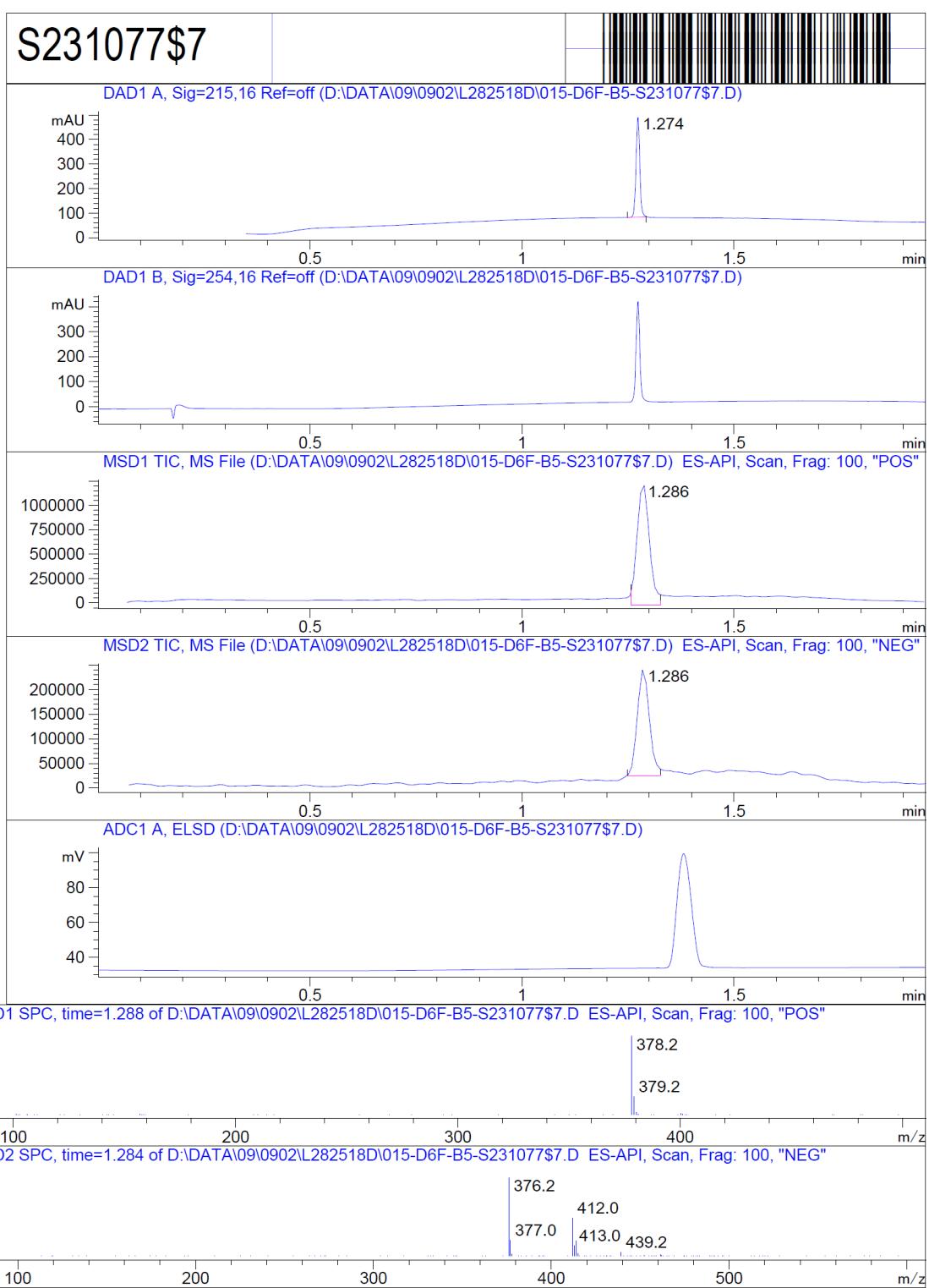


MaxPeak: 100.00%
Ret_Time: 1.274 min



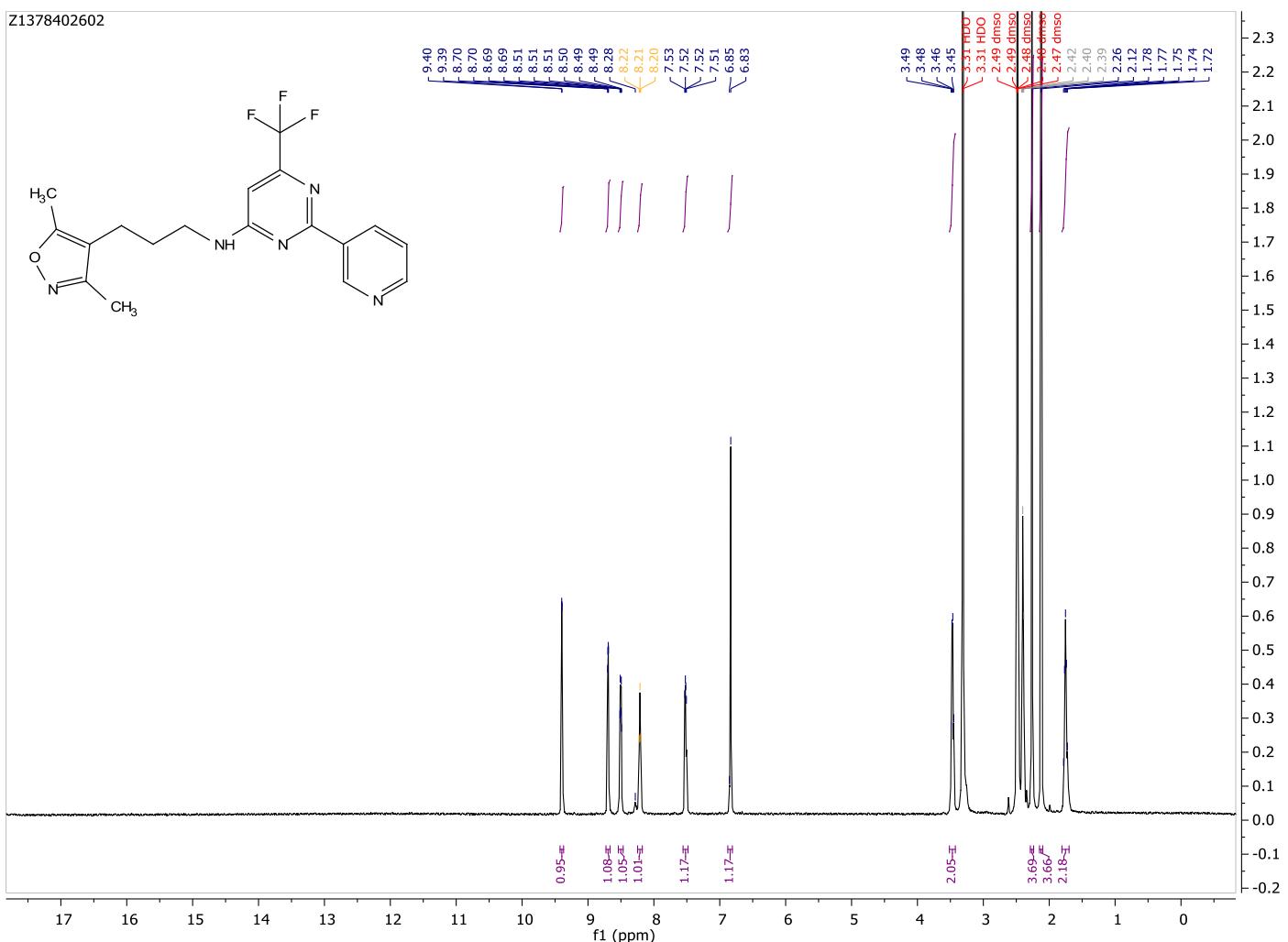
Mol Wt 377.36
Exact Mass 377.17
Time Area%

1 1.274 100.00

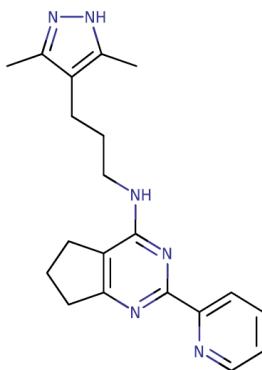


Z1378402602

Z1378402602

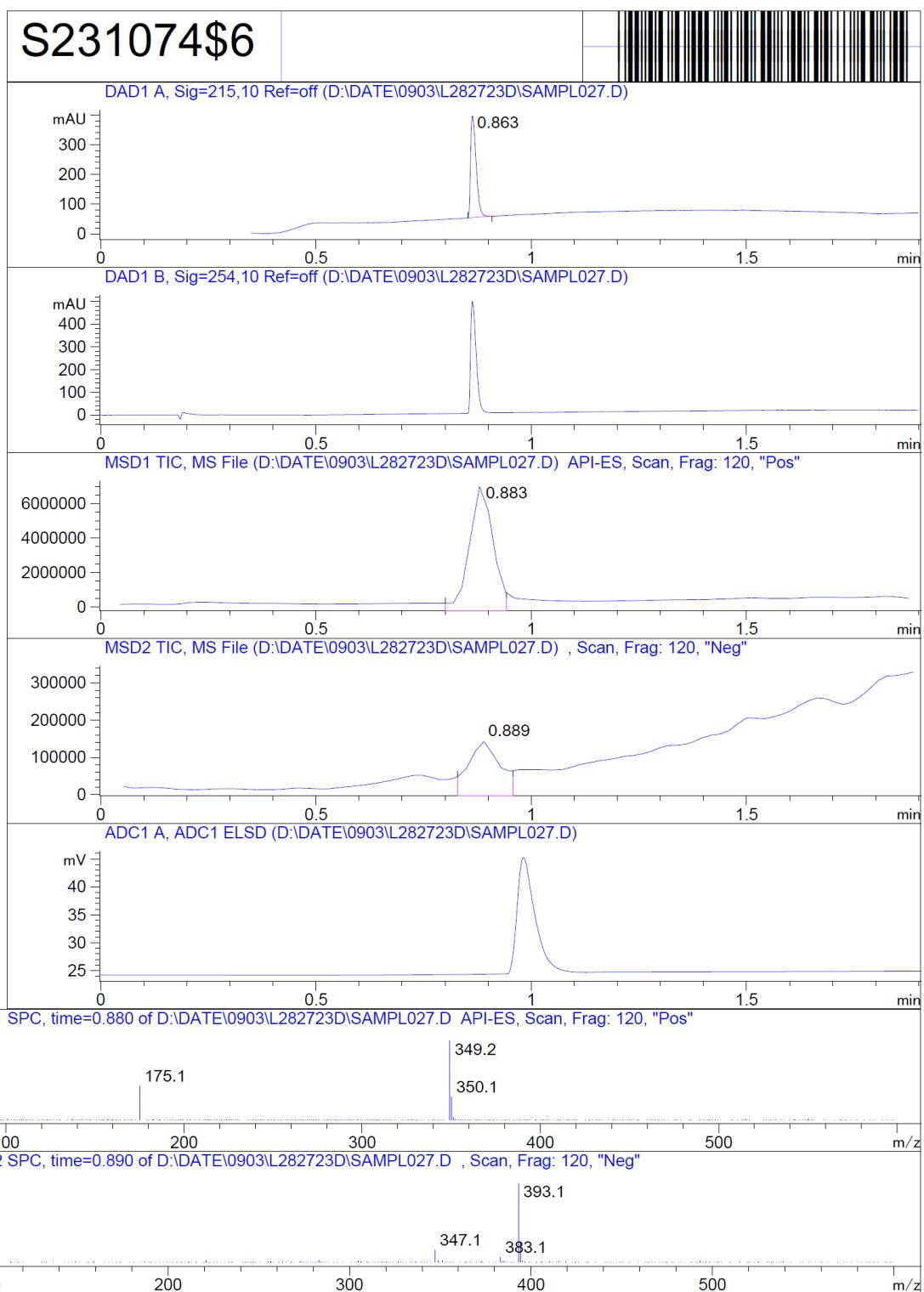


MaxPeak: 100.00%
Ret_Time: 0.863 min



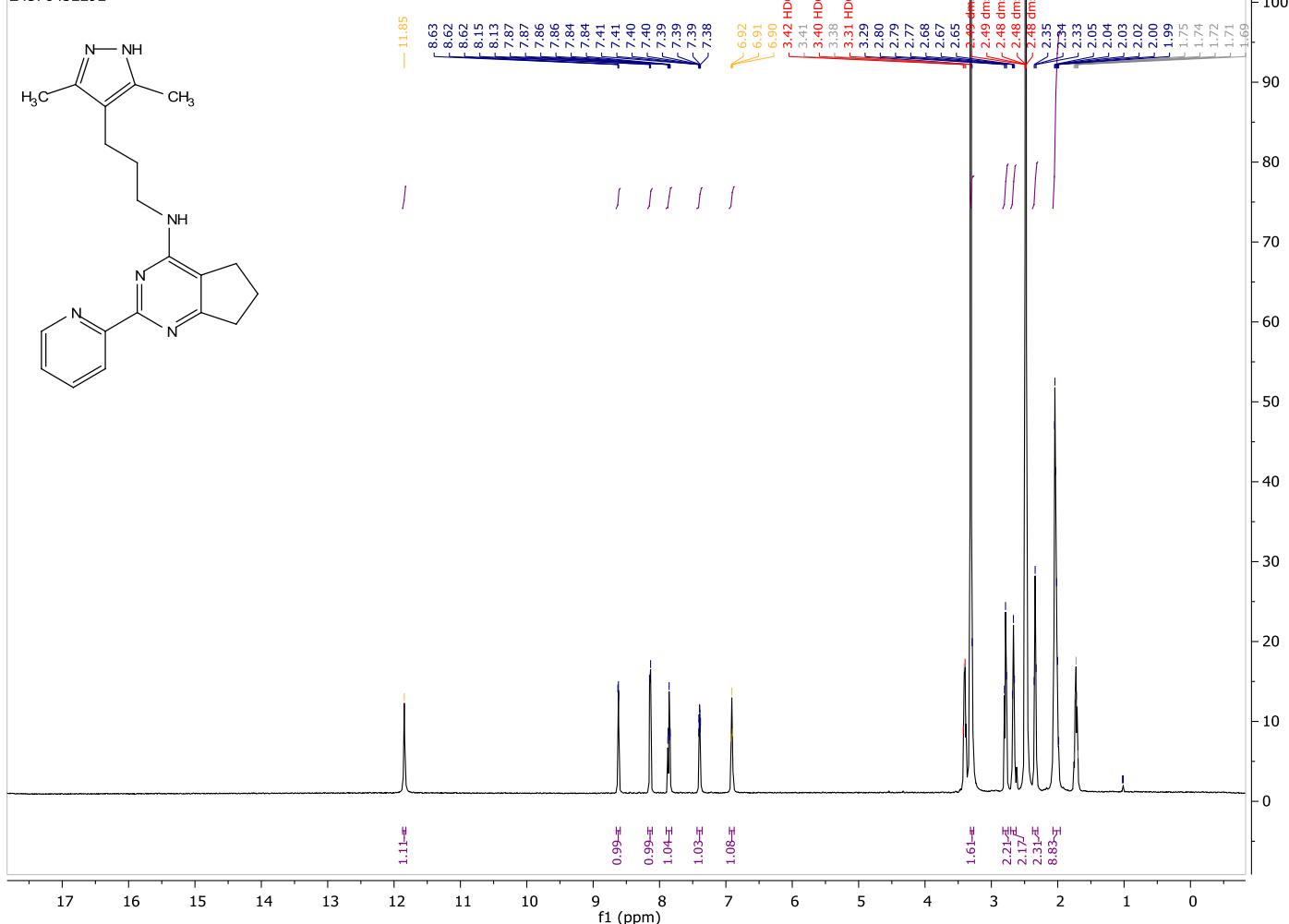
Mol Wt 348.44
Exact Mass 348.24
Time Area%

1 0.863 100.00

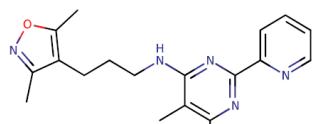


Z4576452292

Z4576452292

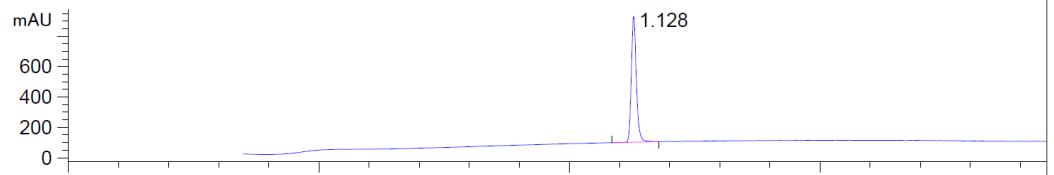


MaxPeak: 100.00%
Ret_Time: 1.128 min

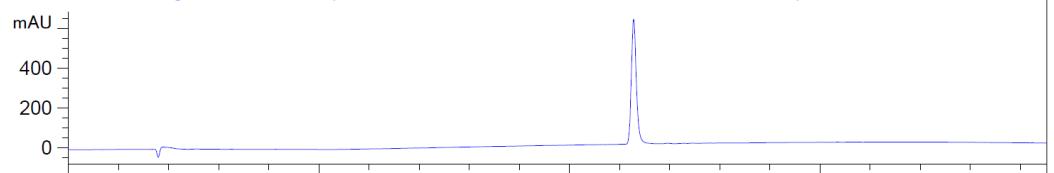


S238059\$1

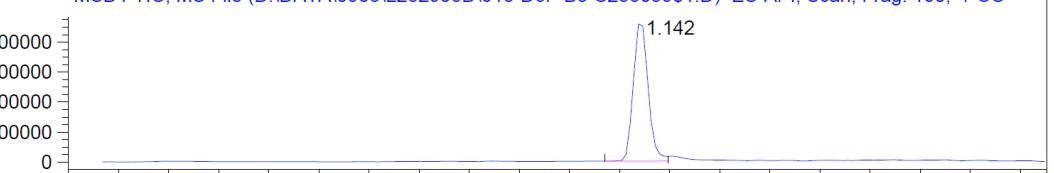
DAD1 A, Sig=215,16 Ref=off (D:\DATA\0903\L282906D\018-D6F-B8-S238059\$1.D)



DAD1 B, Sig=254,16 Ref=off (D:\DATA\0903\L282906D\018-D6F-B8-S238059\$1.D)



MSD1 TIC, MS File (D:\DATA\0903\L282906D\018-D6F-B8-S238059\$1.D) ES-API, Scan, Frag: 100, "POS"



MSD2 TIC, MS File (D:\DATA\0903\L282906D\018-D6F-B8-S238059\$1.D) ES-API, Scan, Frag: 100, "NEG"



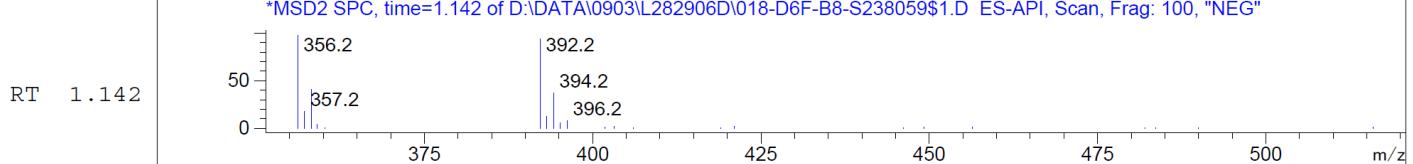
ADC1 A, ELSD (D:\DATA\0903\L282906D\018-D6F-B8-S238059\$1.D)



*MSD1 SPC, time=1.138 of D:\DATA\0903\L282906D\018-D6F-B8-S238059\$1.D ES-API, Scan, Frag: 100, "POS"

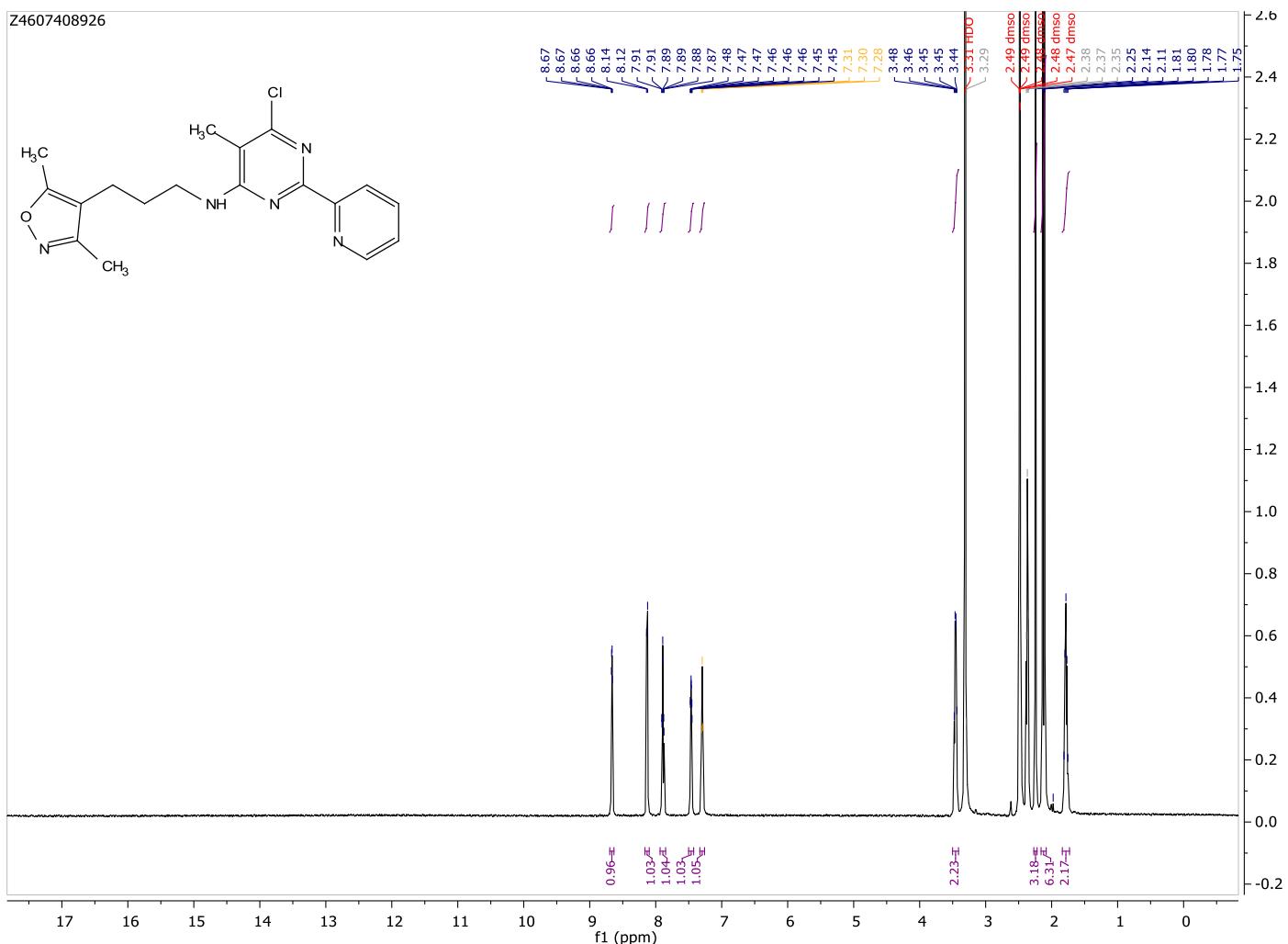


*MSD2 SPC, time=1.142 of D:\DATA\0903\L282906D\018-D6F-B8-S238059\$1.D ES-API, Scan, Frag: 100, "NEG"

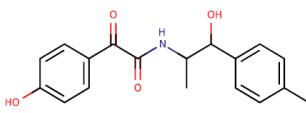


Z4607408926

Z4607408926

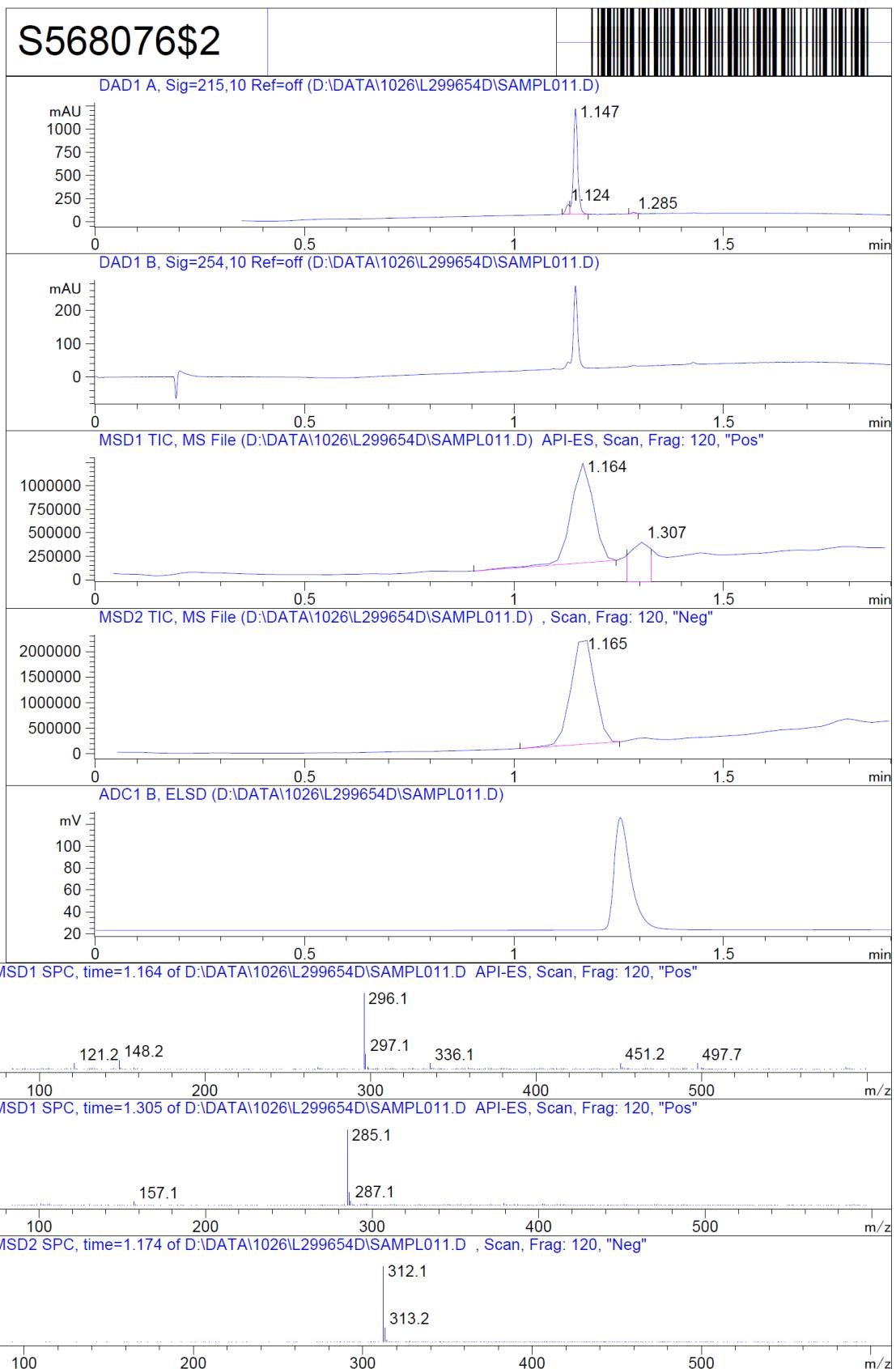


MaxPeak: 91.57%
Ret_Time: 1.147 min



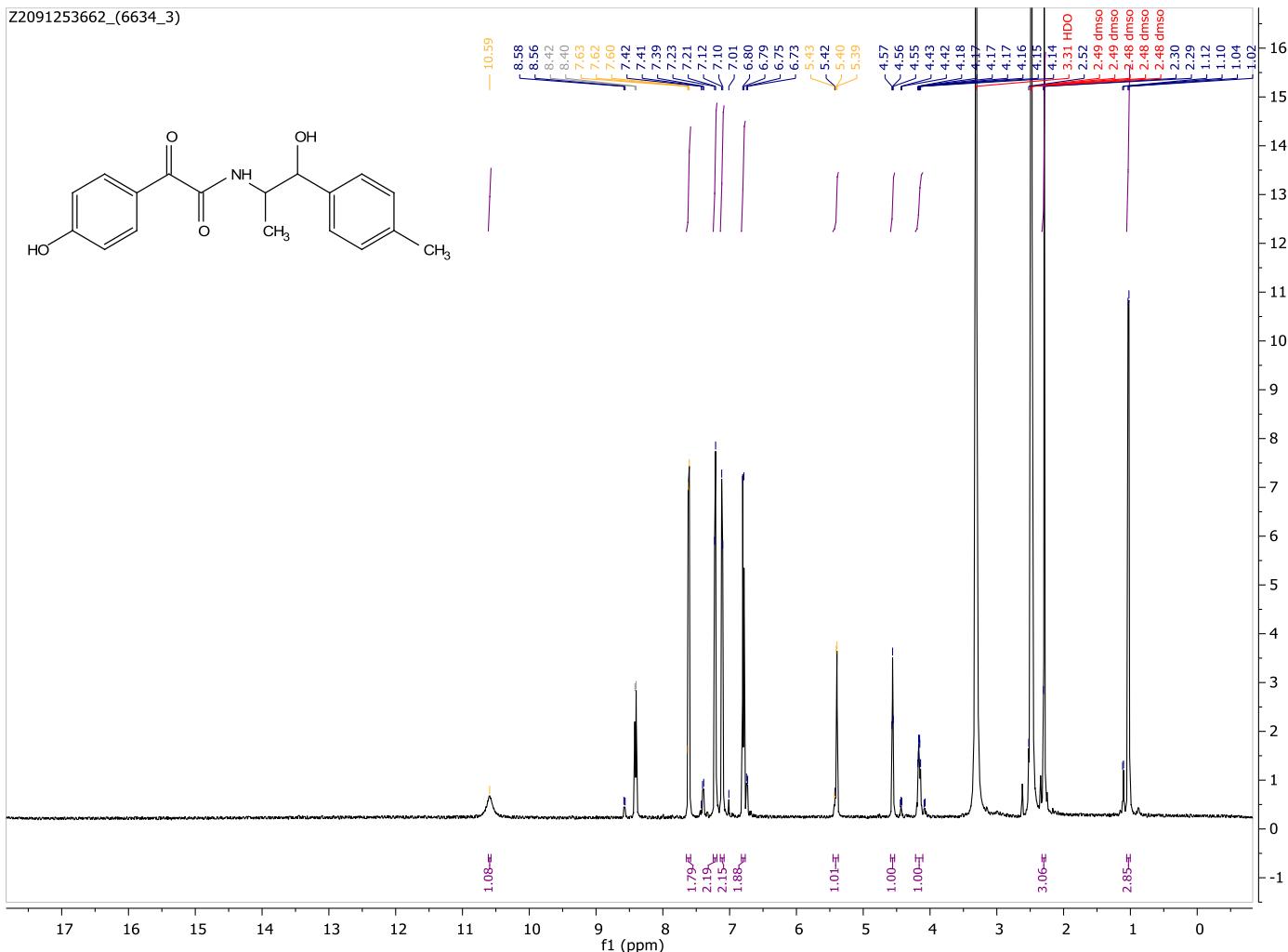
Mol Wt 313.35
Exact Mass 313.15
Time Area%

1 1.124 7.28
2 1.147 91.57
3 1.285 1.15

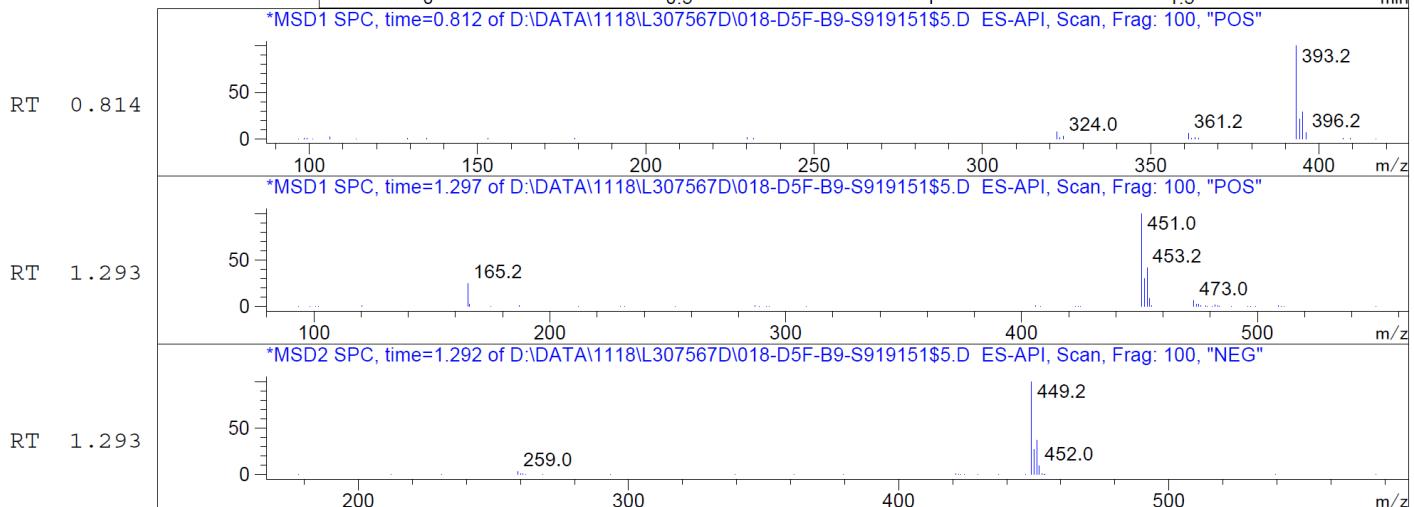
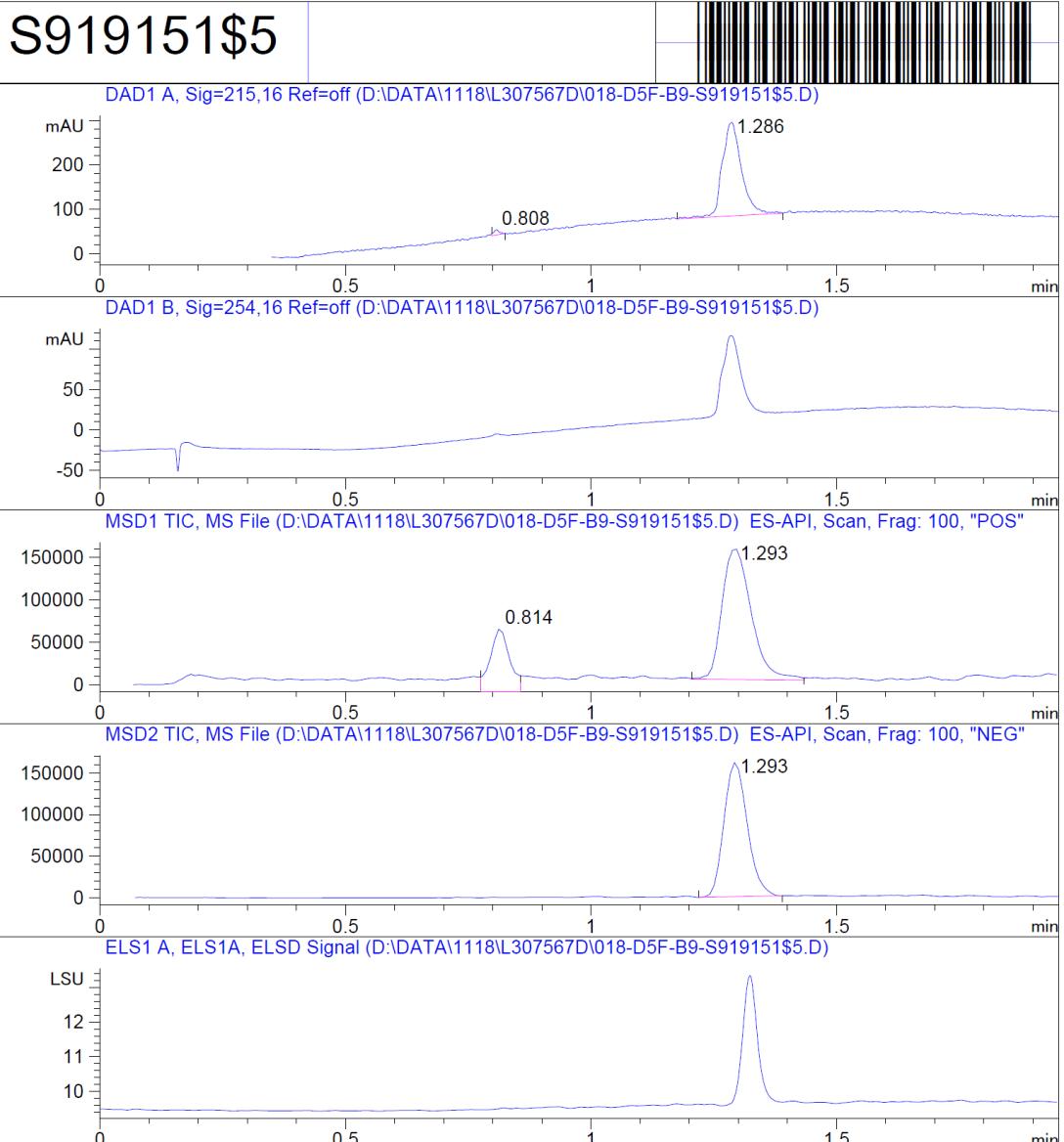
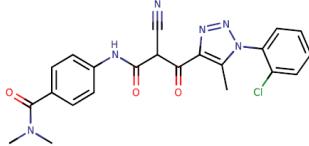


Z2091253662_(6634_3)

Z2091253662_(6634_3)

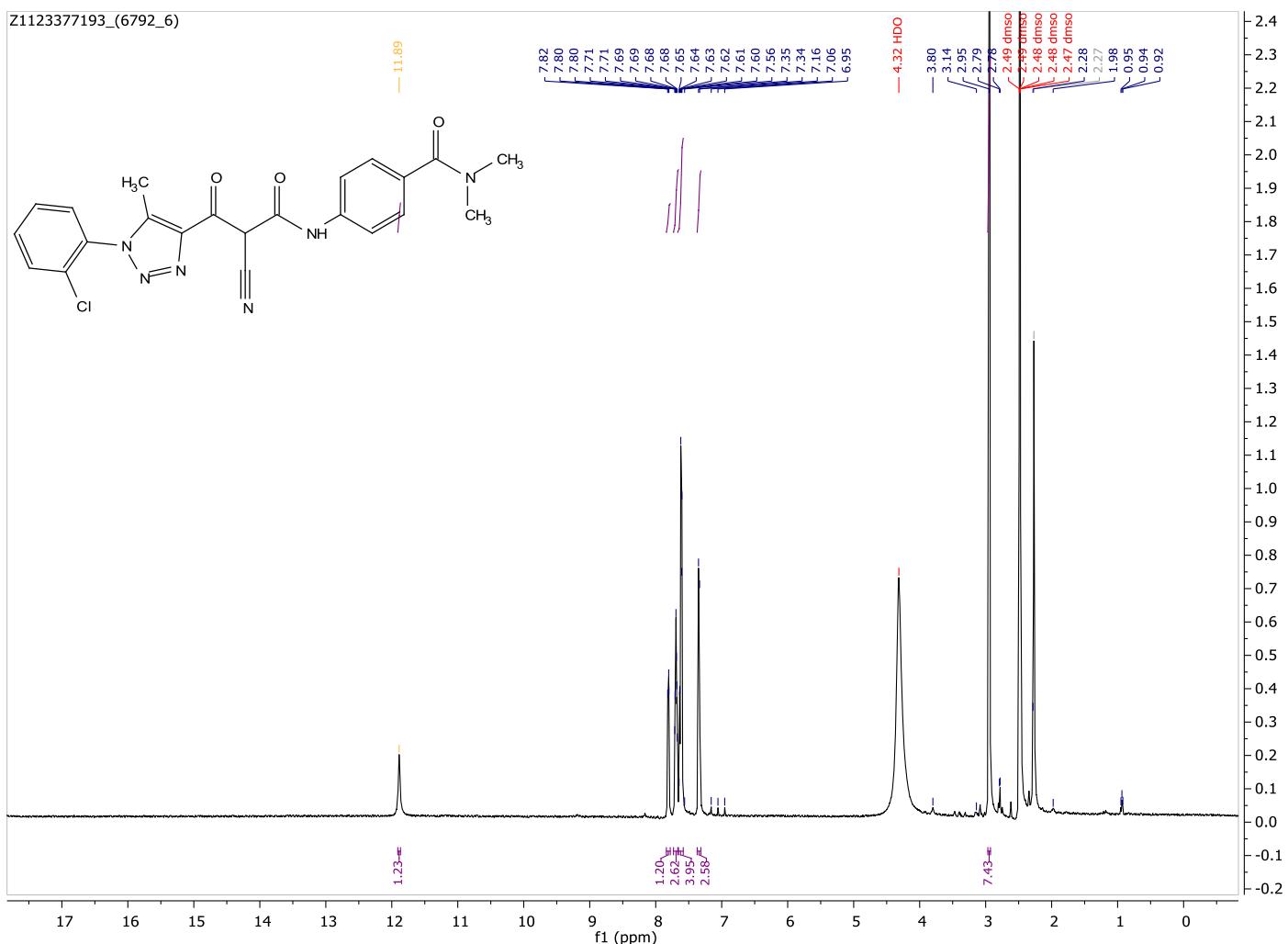


MaxPeak: 98.42%
Ret_Time: 1.286 min

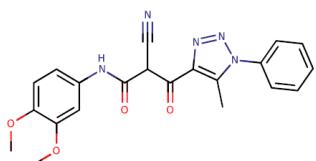


Z1123377193_(6792_6)

Z1123377193_(6792_6)

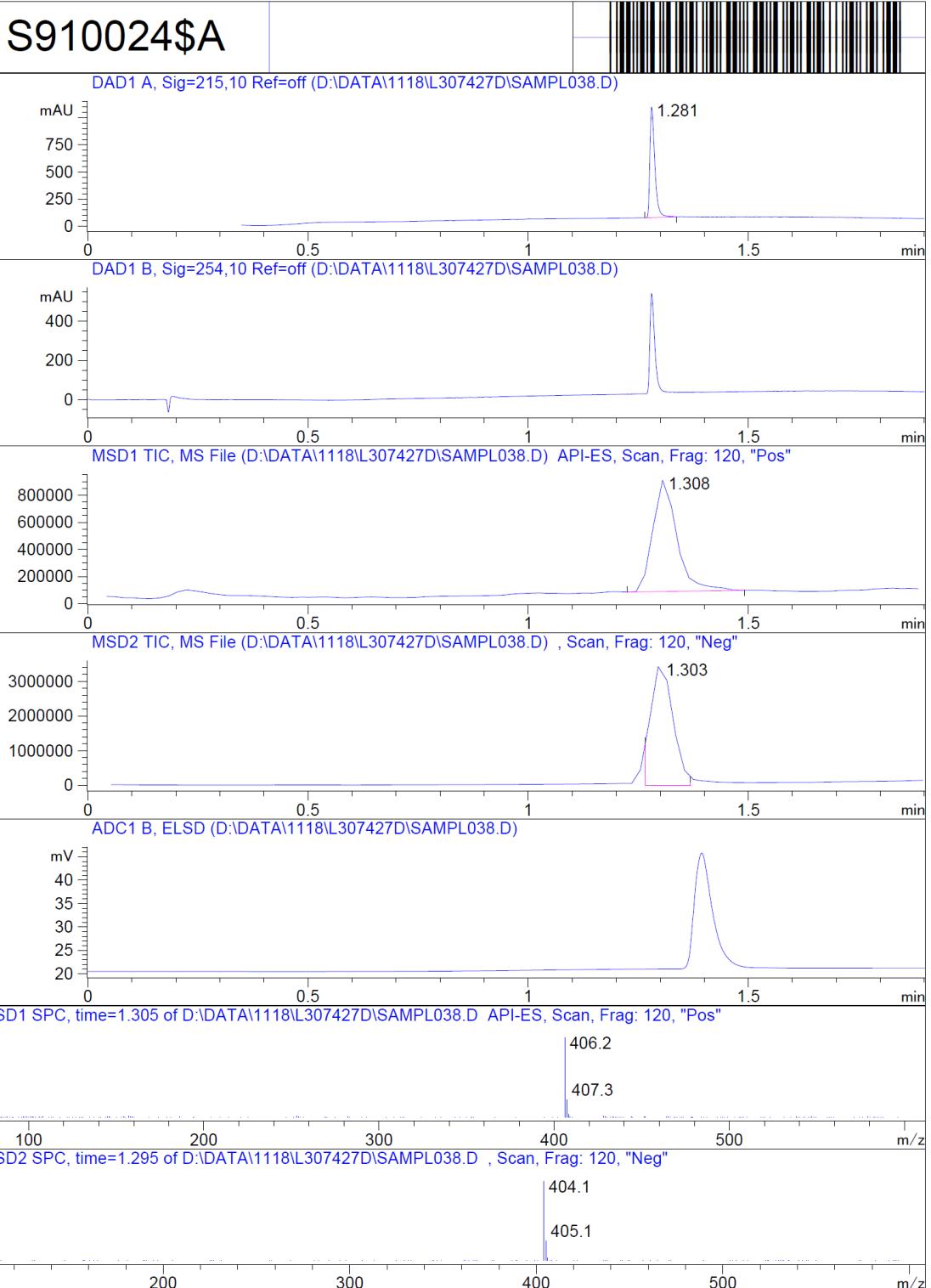


MaxPeak: 100.00%
Ret_Time: 1.281 min



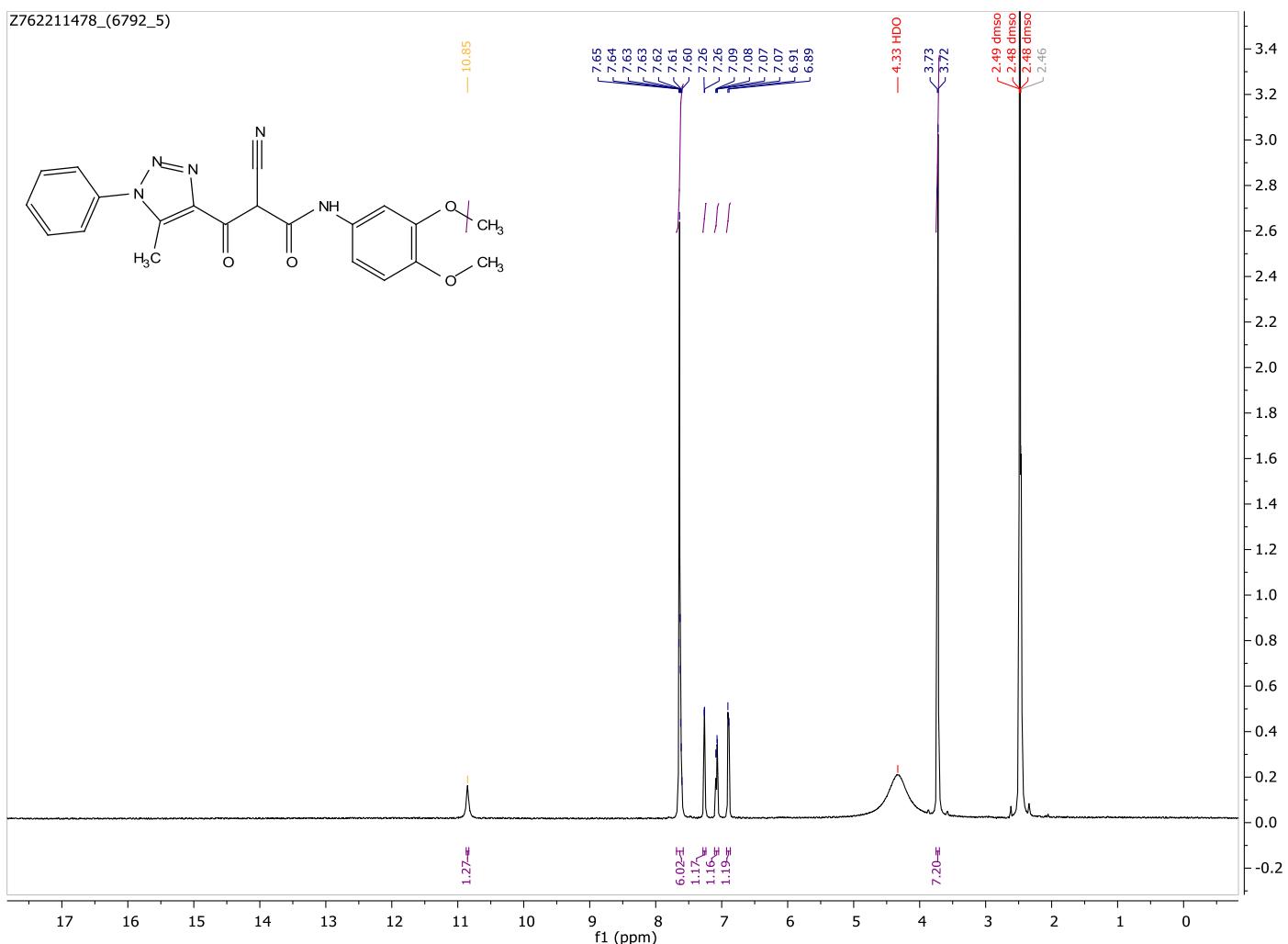
Mol Wt 405.41
Exact Mass 405.15
Time Area%

1 1.281 100.00

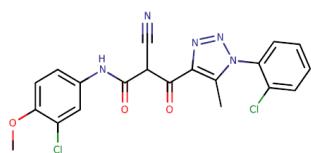


Z762211478_(6792_5)

Z762211478_(6792_5)

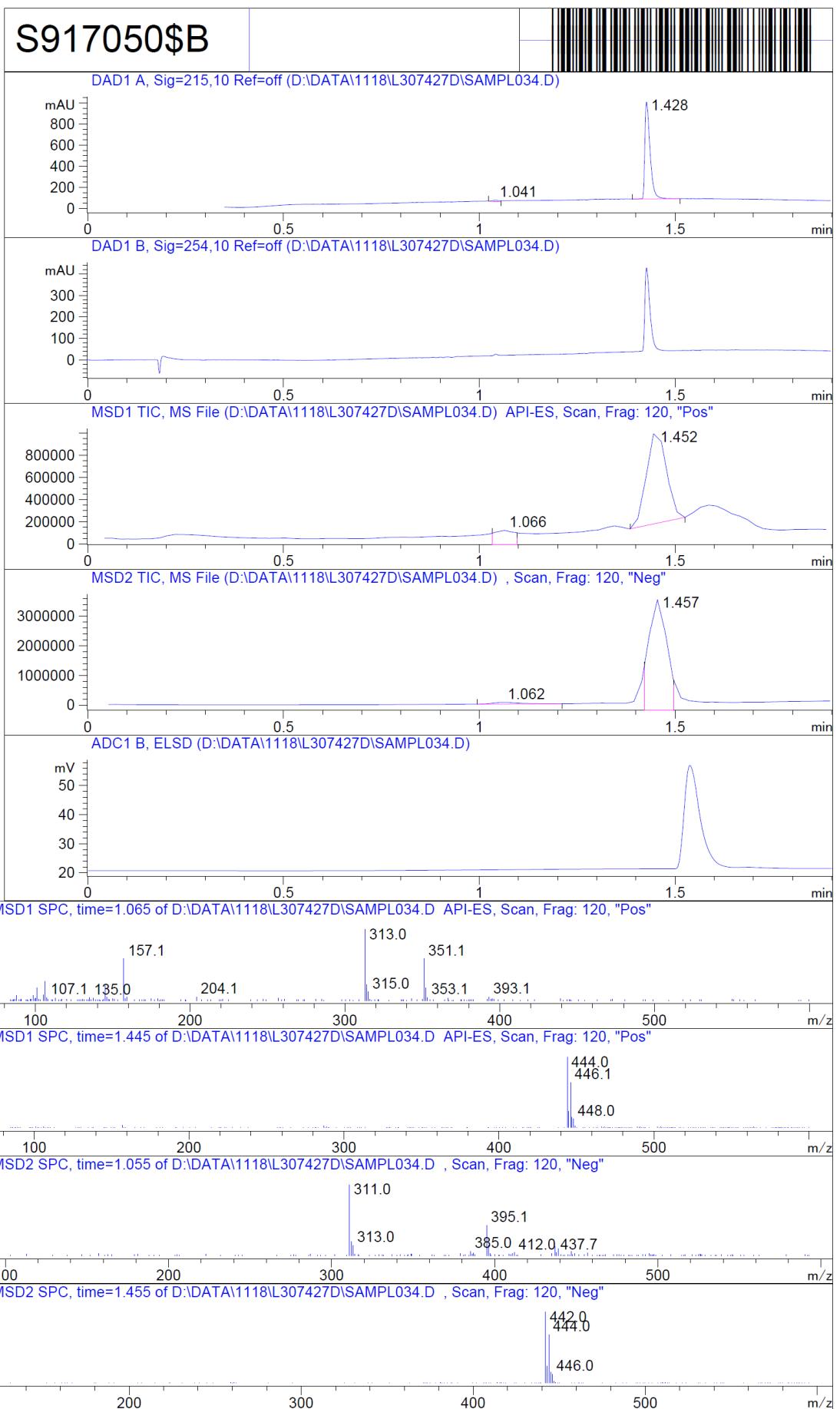


MaxPeak: 98.46%
Ret_Time: 1.428 min



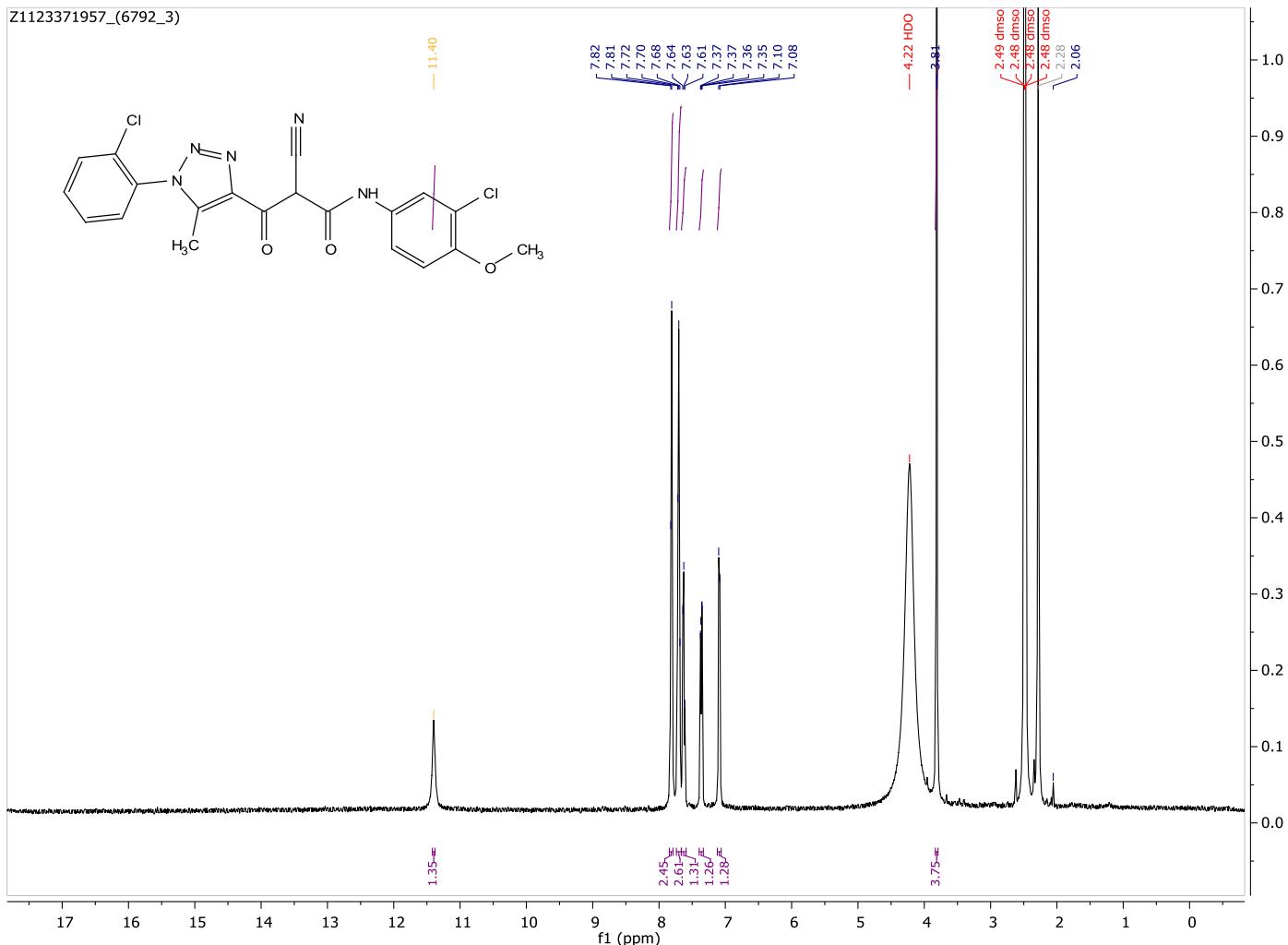
Mol Wt 444.27
Exact Mass 443.06
Time Area%

#	Time	Area%
1	1.041	1.54
2	1.428	98.46

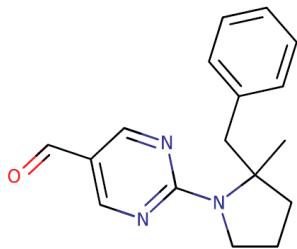


Z1123371957_(6792_3)

Z1123371957_(6792_3)

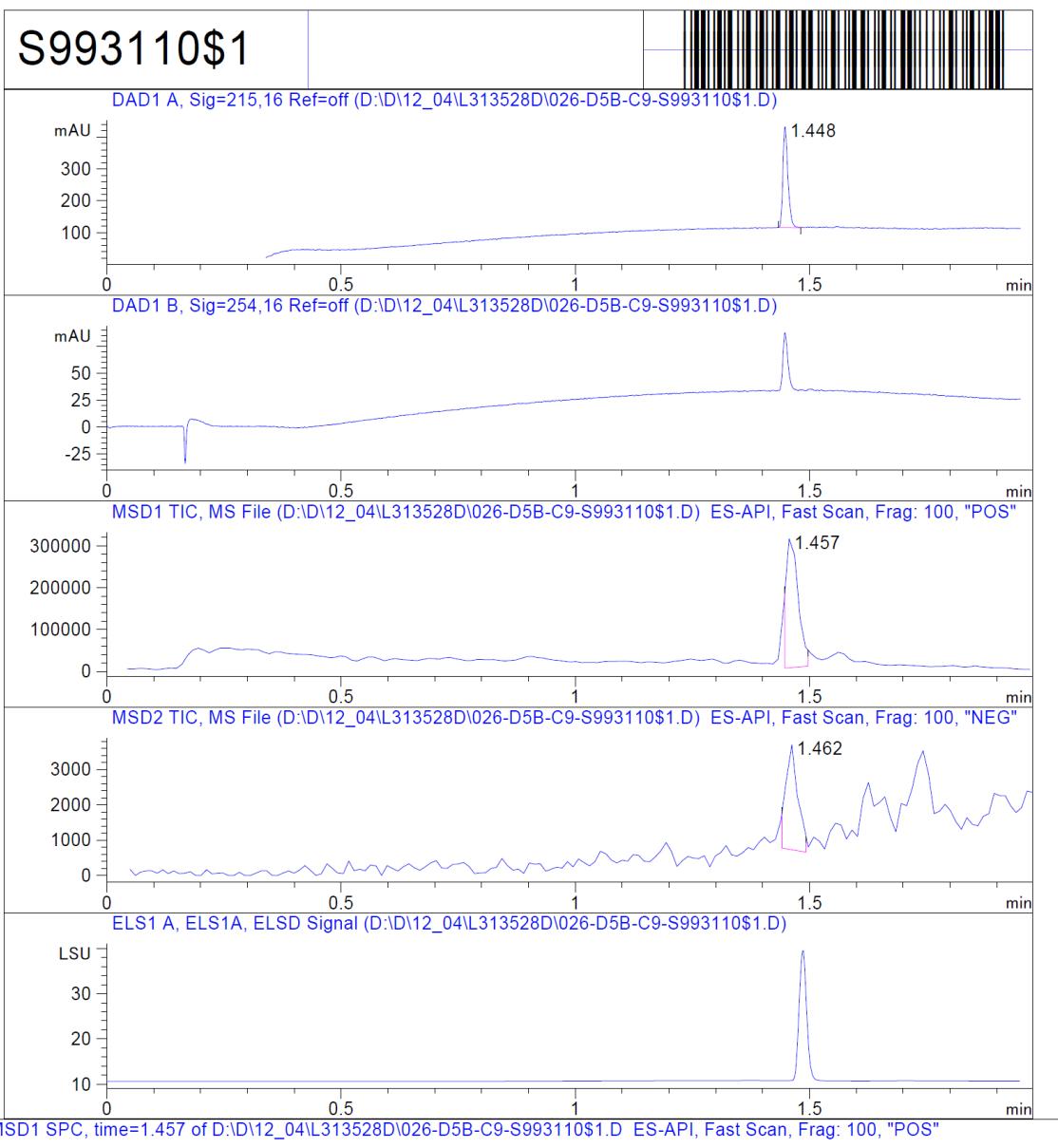


MaxPeak: 100.00%
Ret_Time: 1.448 min



Mol Wt 281.35
Exact Mass 281.18
Time Area%

1 1.448 100.00

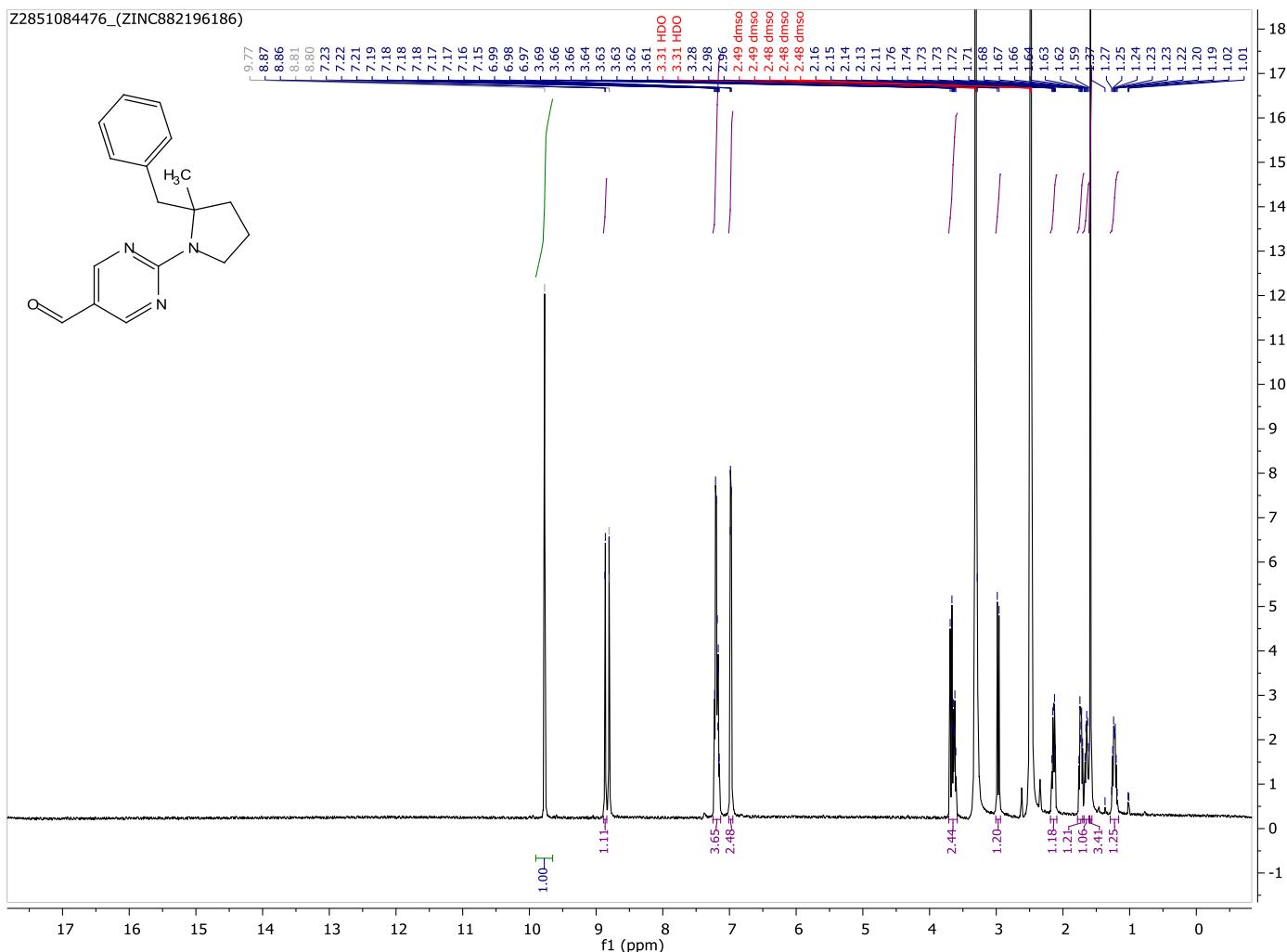


*MSD1 SPC, time=1.457 of D:\D\12_04\1313528D\026-D5B-C9-S993110\$1.D ES-API, Fast Scan, Frag: 100, "POS"

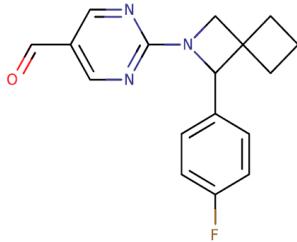


Z2851084476_(ZINC882196186)

Z2851084476_(ZINC882196186)

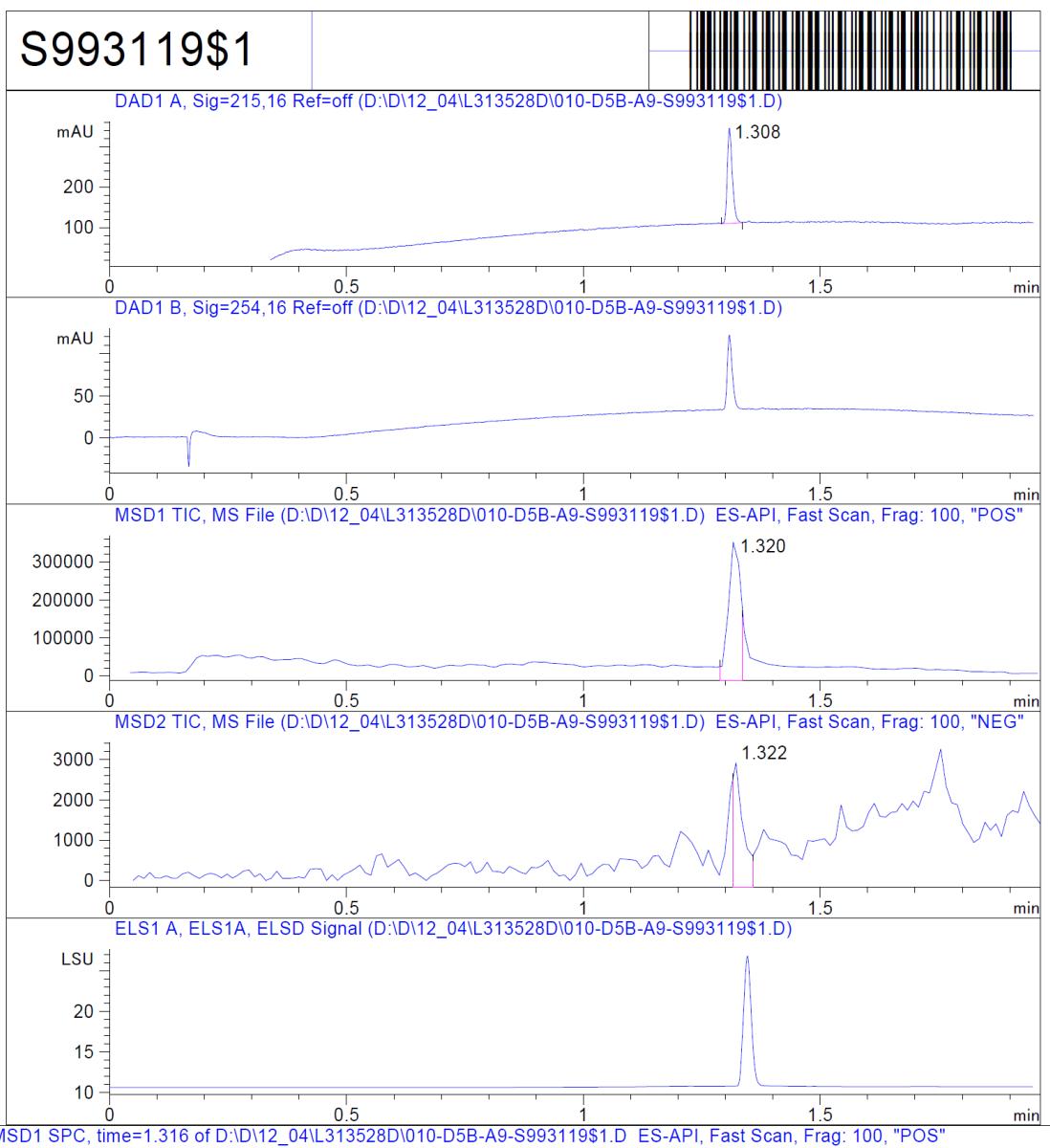


MaxPeak: 100.00%
Ret_Time: 1.308 min



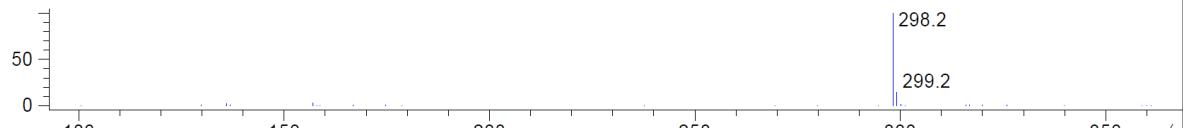
Mol Wt 297.33
Exact Mass 297.15
Time Area%

1 1.308 100.00



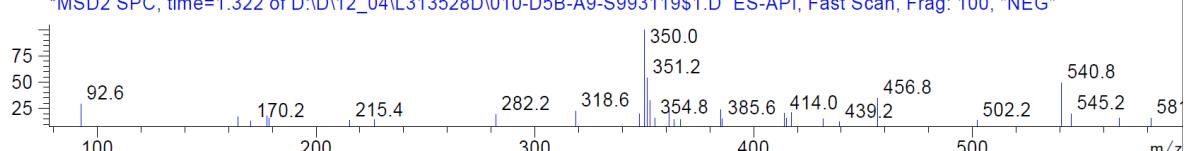
*MSD1 SPC, time=1.316 of D:\D\12_04\L313528D\010-D5B-A9-S993119\$1.D ES-API, Fast Scan, Frag: 100, "POS"

RT 1.320



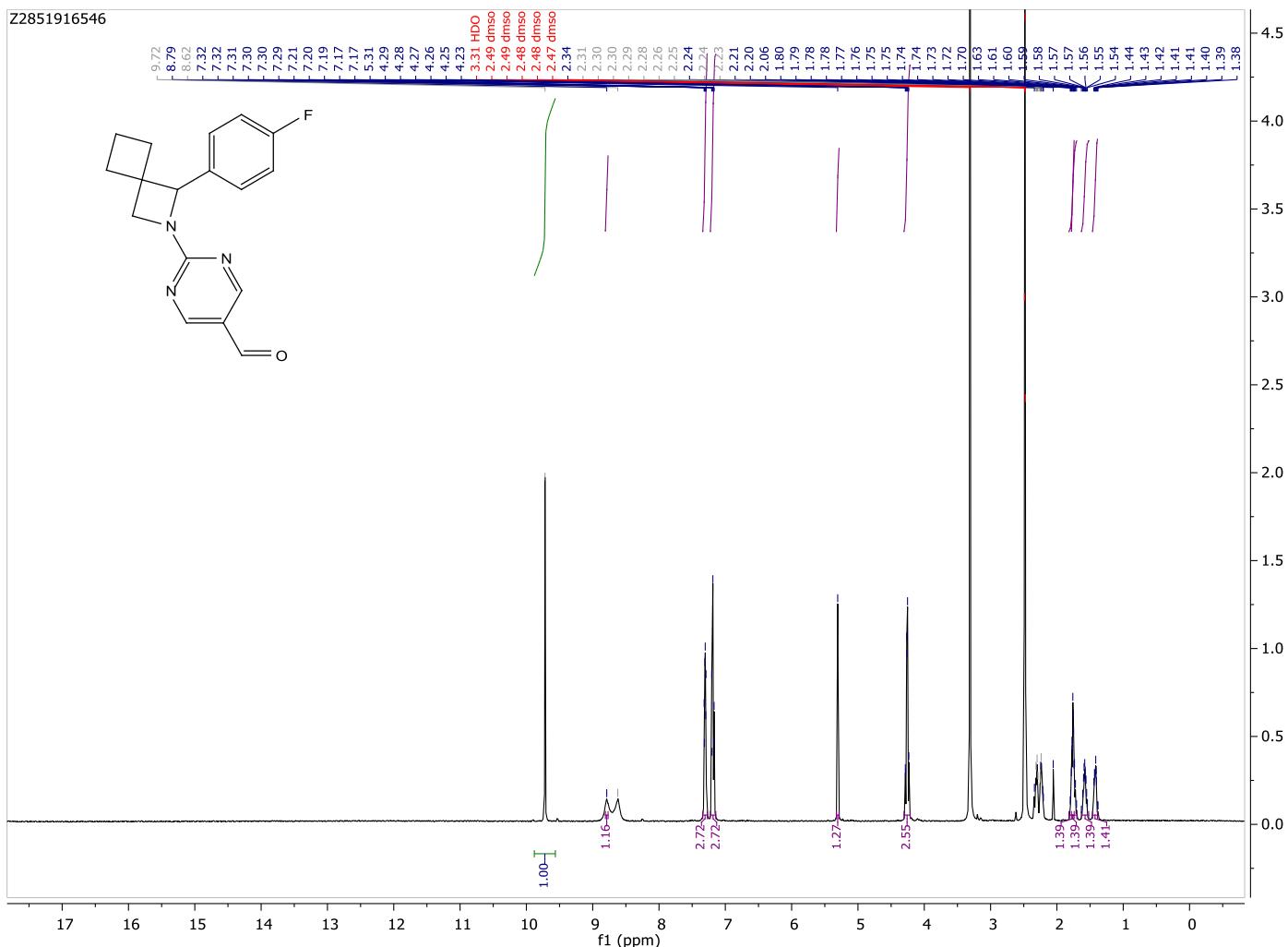
*MSD2 SPC, time=1.322 of D:\D\12_04\L313528D\010-D5B-A9-S993119\$1.D ES-API, Fast Scan, Frag: 100, "NEG"

RT 1.322

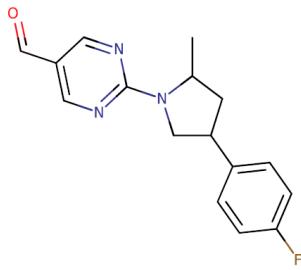


Z2851916546

Z2851916546

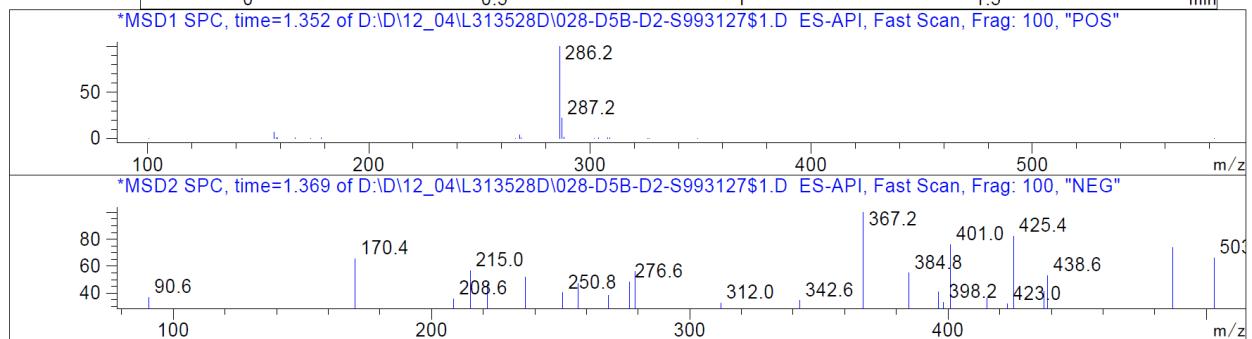
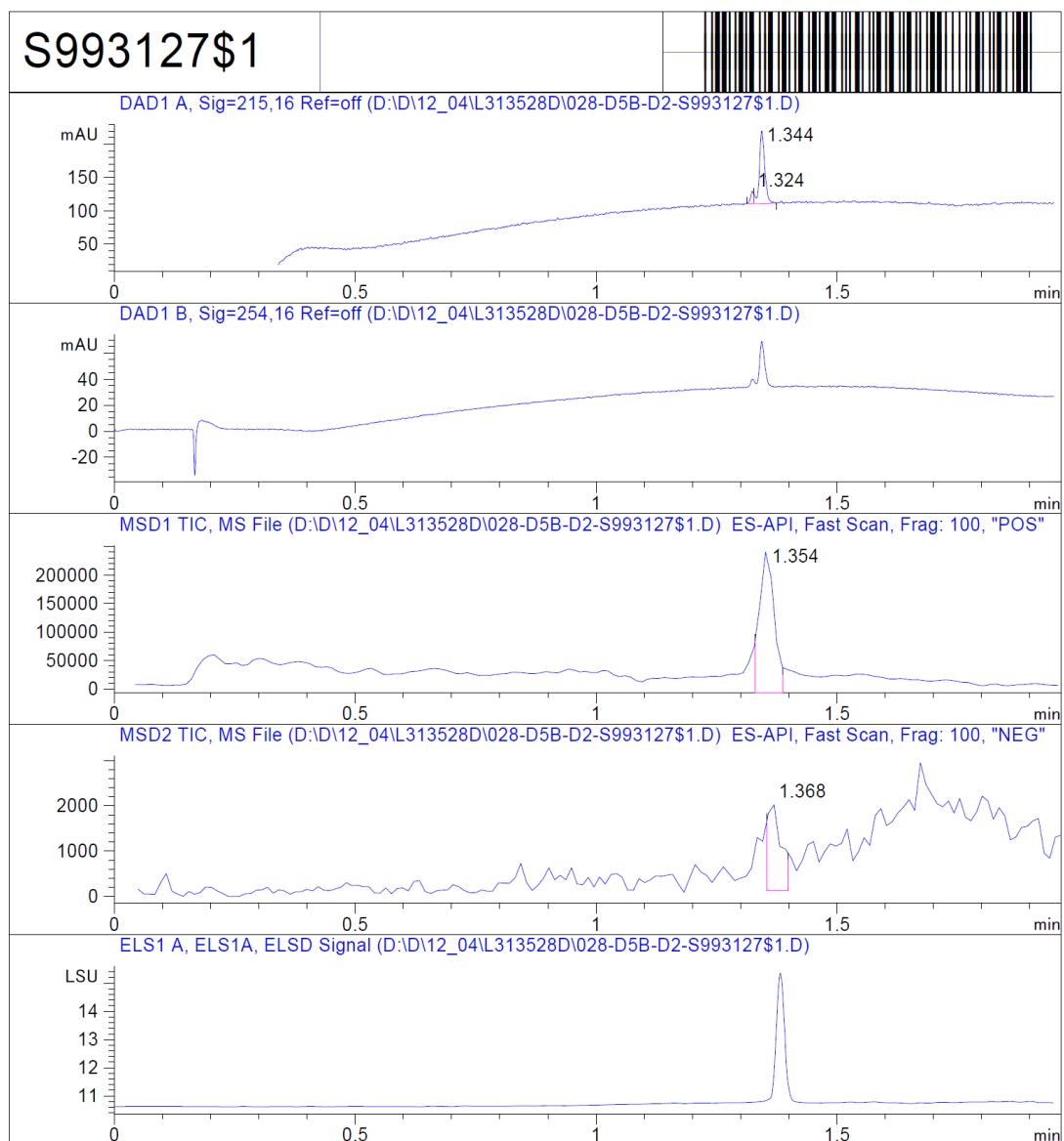


MaxPeak: 90.85%
Ret_Time: 1.344 min



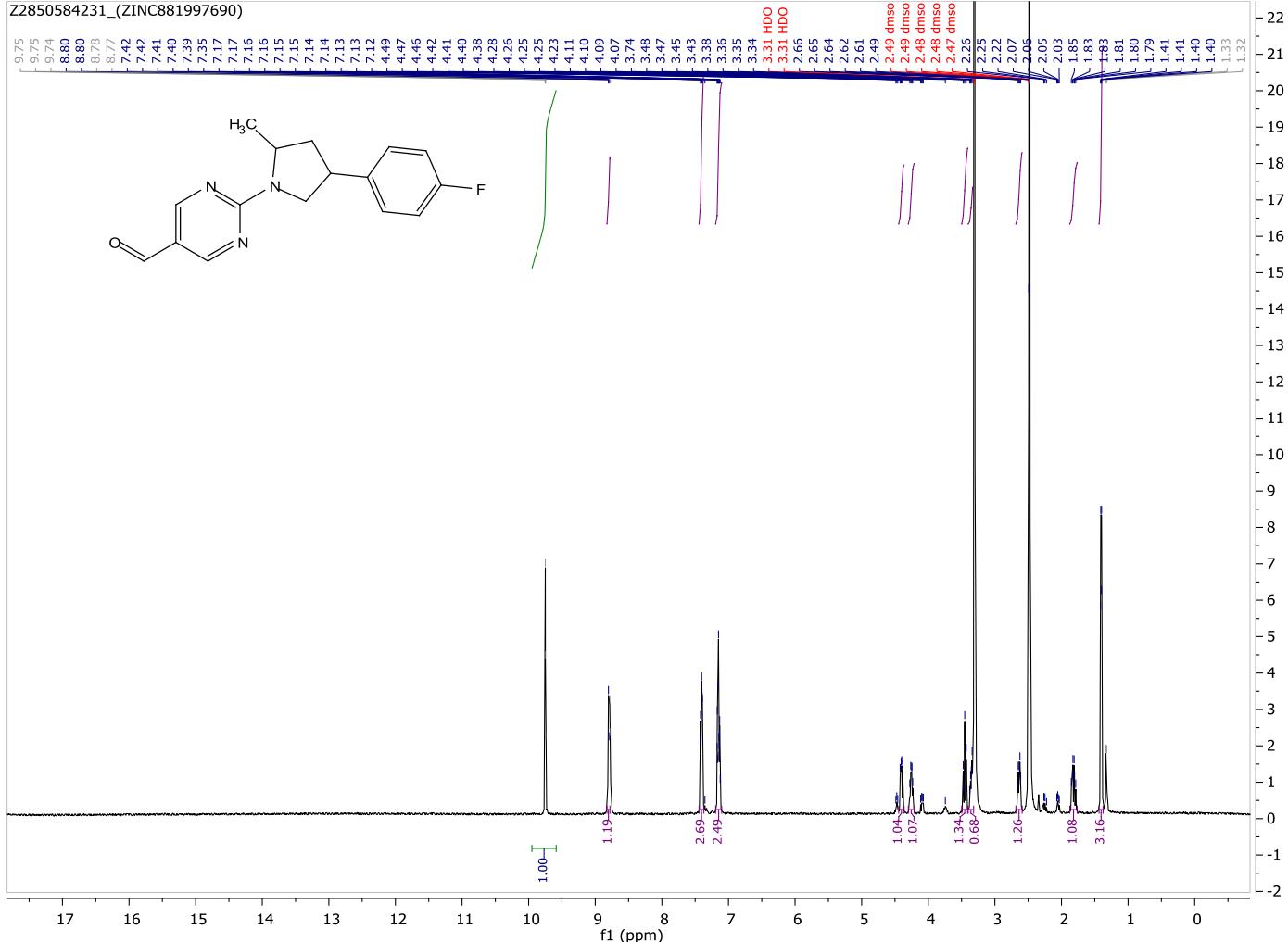
Mol Wt 285.32
Exact Mass 285.15

#	Time	Area%
1	1.324	9.15
2	1.344	90.85

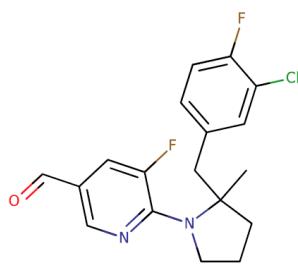


Z2850584231_(ZINC881997690)

Z2850584231_(ZINC881997690)

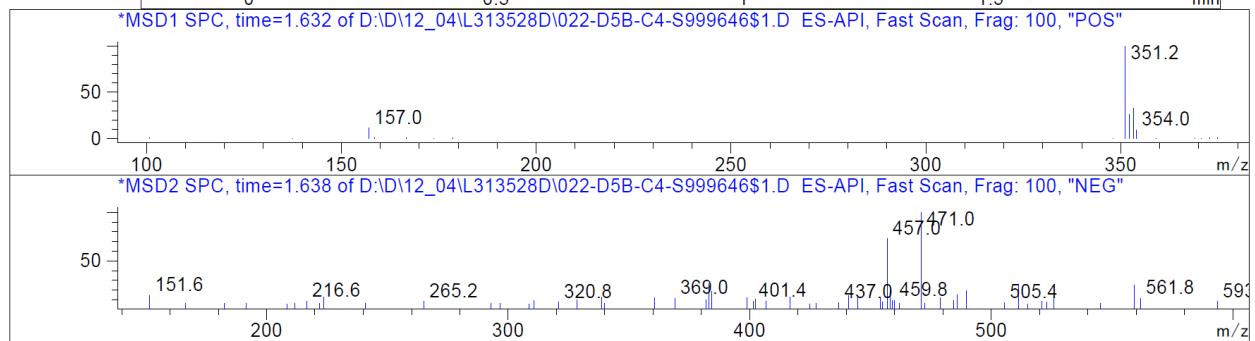
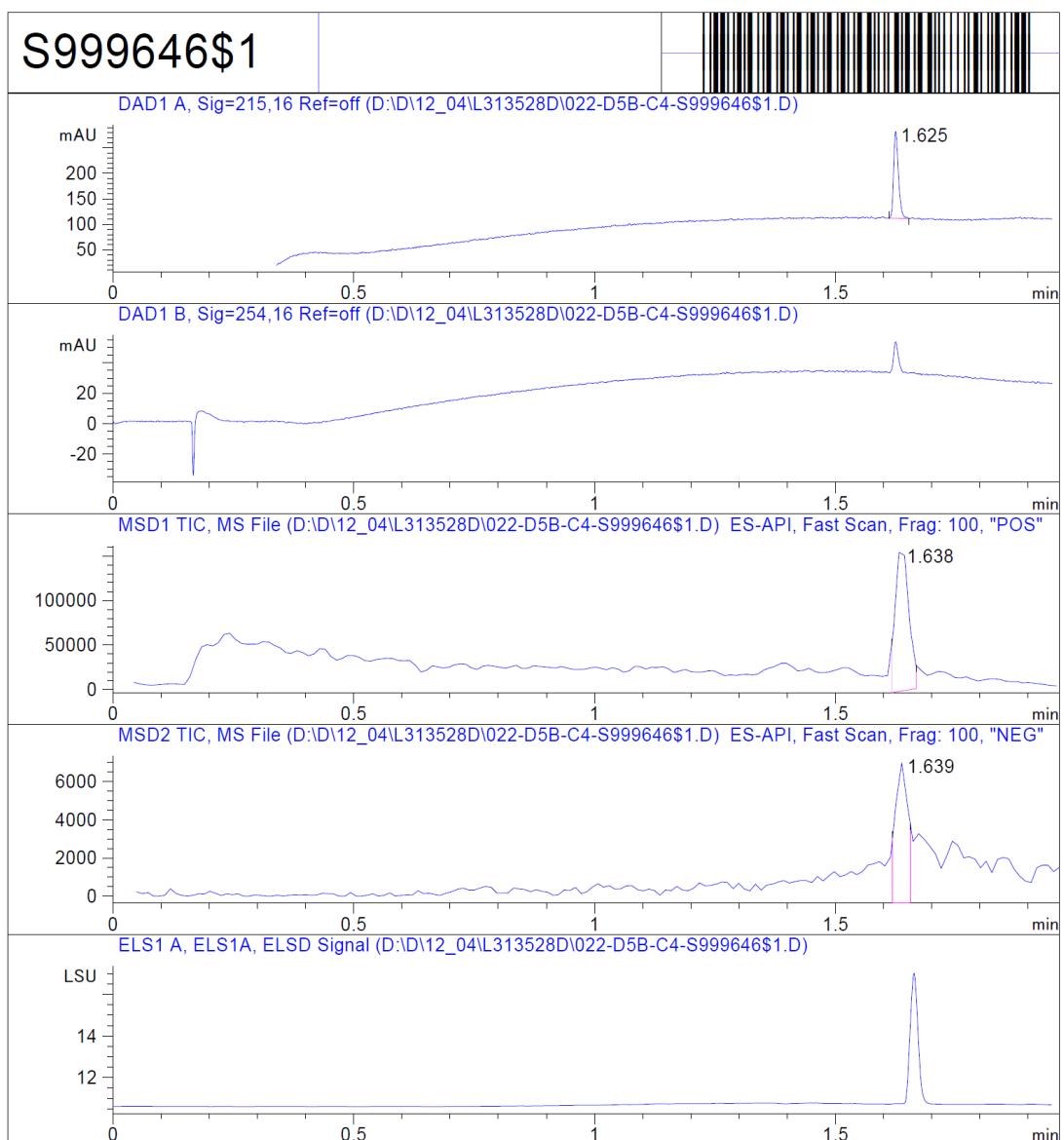


MaxPeak: 100.00%
Ret_Time: 1.625 min



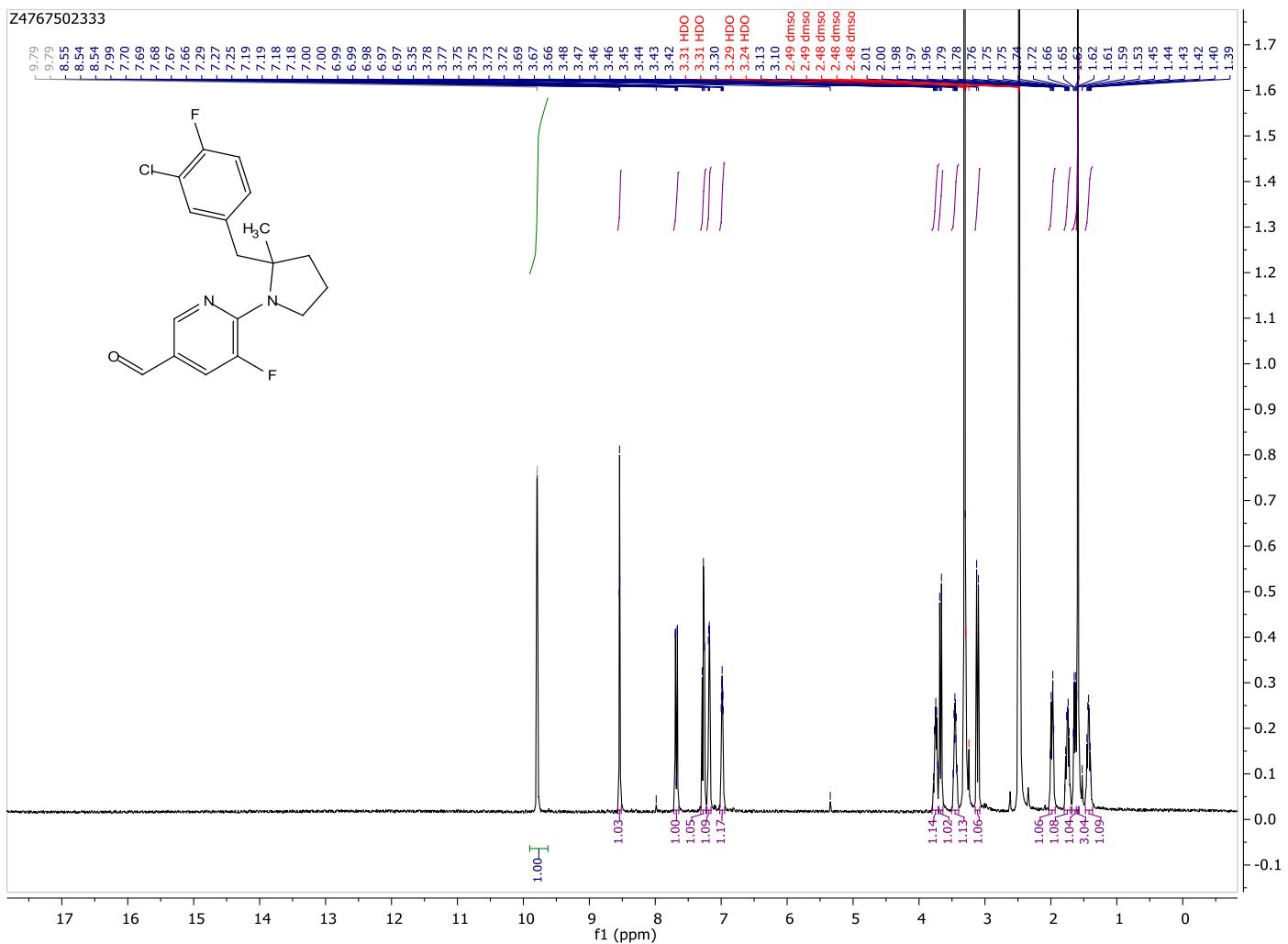
Mol Wt 350.79
Exact Mass 350.13

#	Time	Area%
1	1.625	100.00

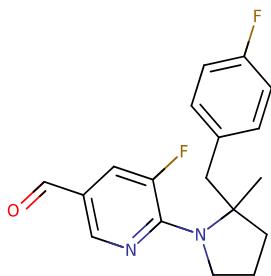


Z4767502333

Z4767502333

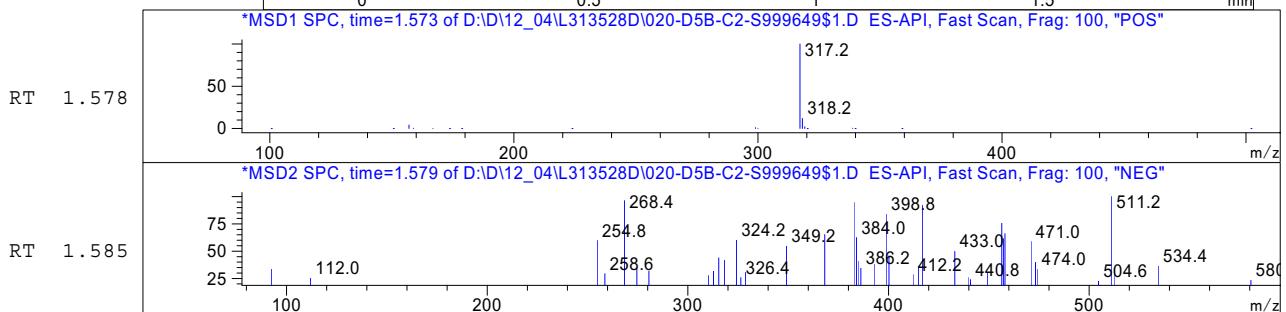
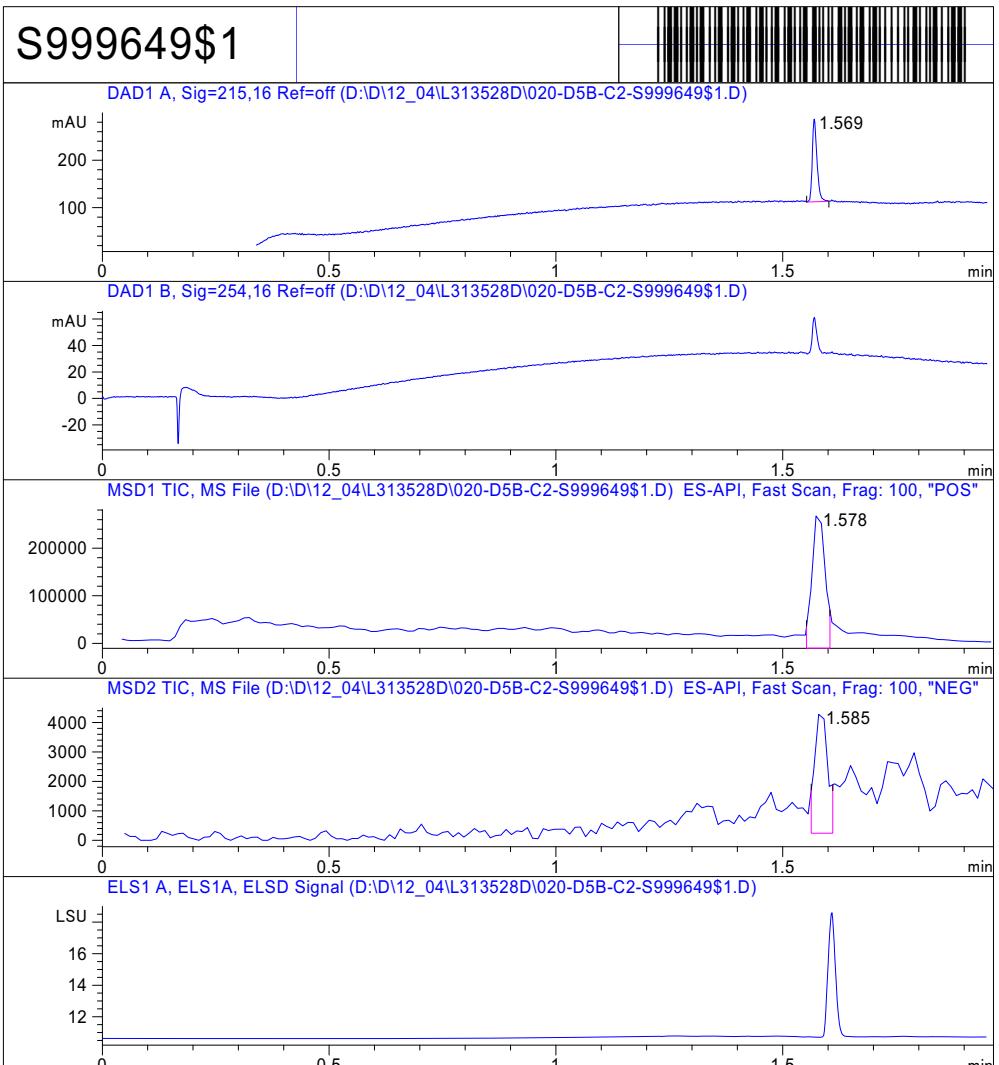


MaxPeak: 100.00%
Ret_Time: 1.569 min



Mol Wt 316.35
Exact Mass 316.17
Time Area%

1 1.569 100.00



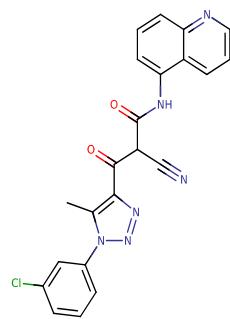
Inj.Date 12/3/2020

N

Acq. Method C:\Users\ -> ->

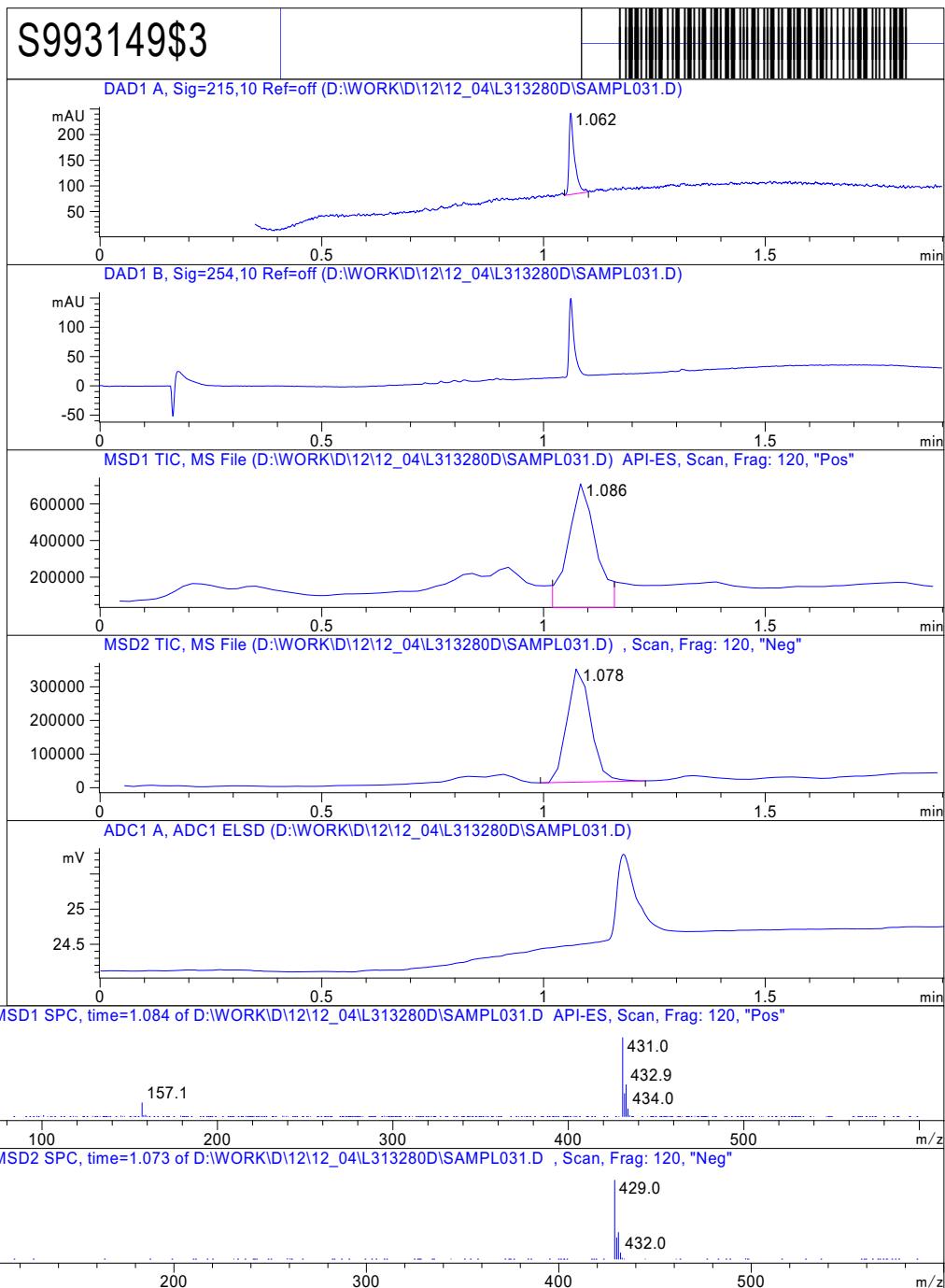
Z4767502336_

MaxPeak: 100.00%
Ret_Time: 1.062 min



Mol Wt 430.85
Exact Mass 430.1
Time Area%

1 1.062 100.00



Inj.Date 12/4/2020

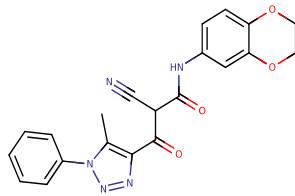
K

-VL-

Acq. Method C:\HPCHEM\ -> ->

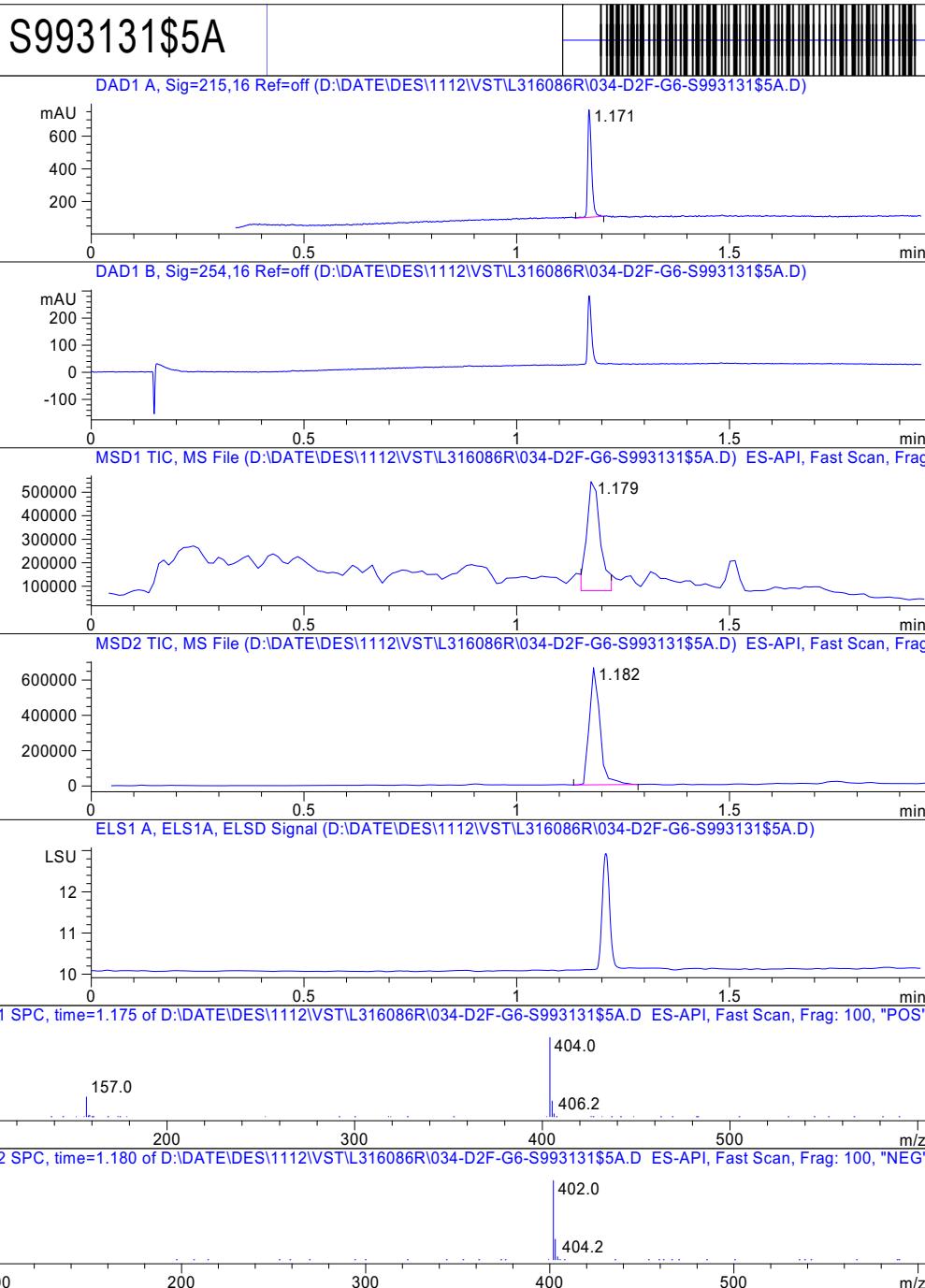
Z762205396_

MaxPeak: 100.00%
Ret_Time: 1.171 min



Mol Wt 403.39
Exact Mass 403.13
Time Area%

1 1.171 100.00



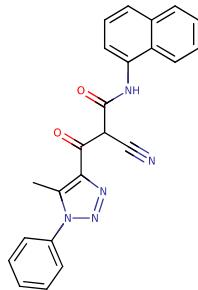
Inj.Date 12/11/2020

Y

Acq. Method C:\Users\ -> ->

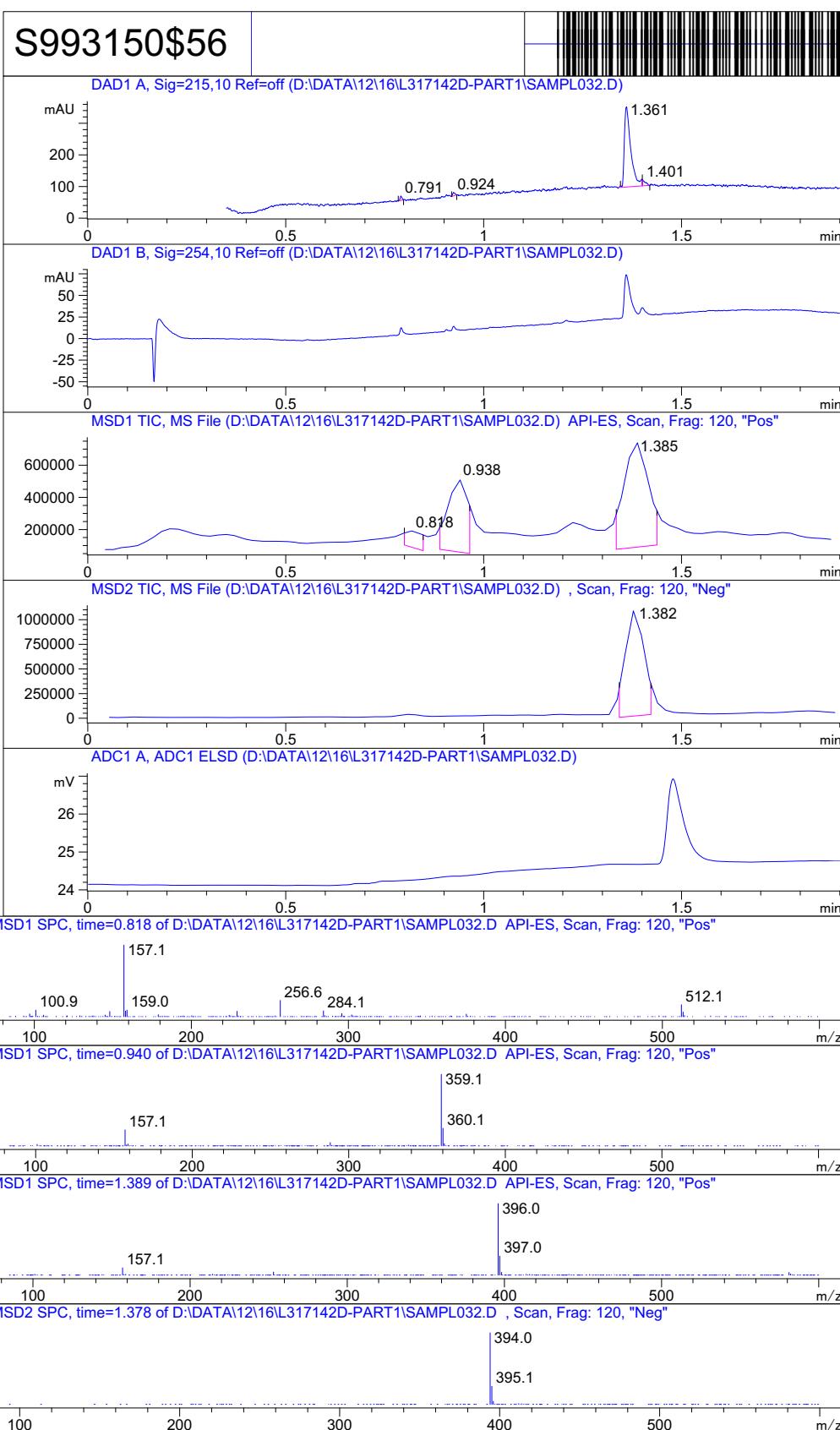
Z762217606_

MaxPeak: 94.15%
Ret_Time: 1.361 min



Mol Wt 395.41
Exact Mass 395.15
Time Area%

1 0.791 1.38
2 0.924 1.34
3 1.361 94.15
4 1.401 3.13



Inj.Date 12/16/2020

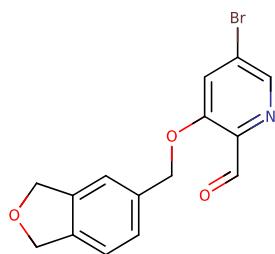
LB

-VL-

Acq. Method C:\HPCHEM\-> ->

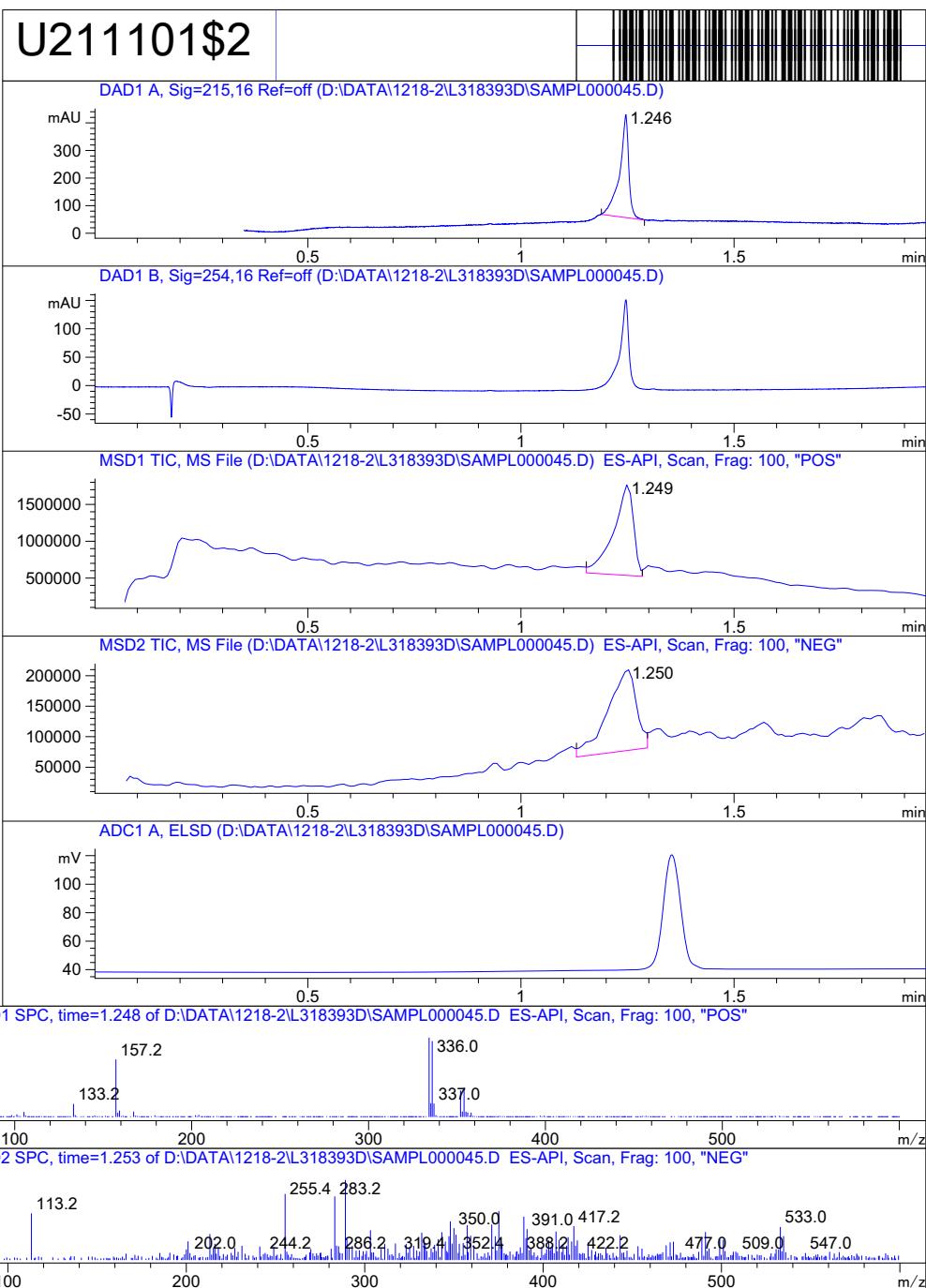
Z762209308_

MaxPeak: 100.00%
Ret_Time: 1.246 min



Mol Wt 334.16
Exact Mass 333.01
Time Area%

1 1.246 100.00



Inj.Date 12/18/2020

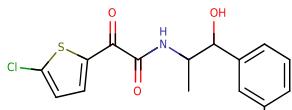
M

-5-

Acq. Method C:\CHEM32\ -> ->

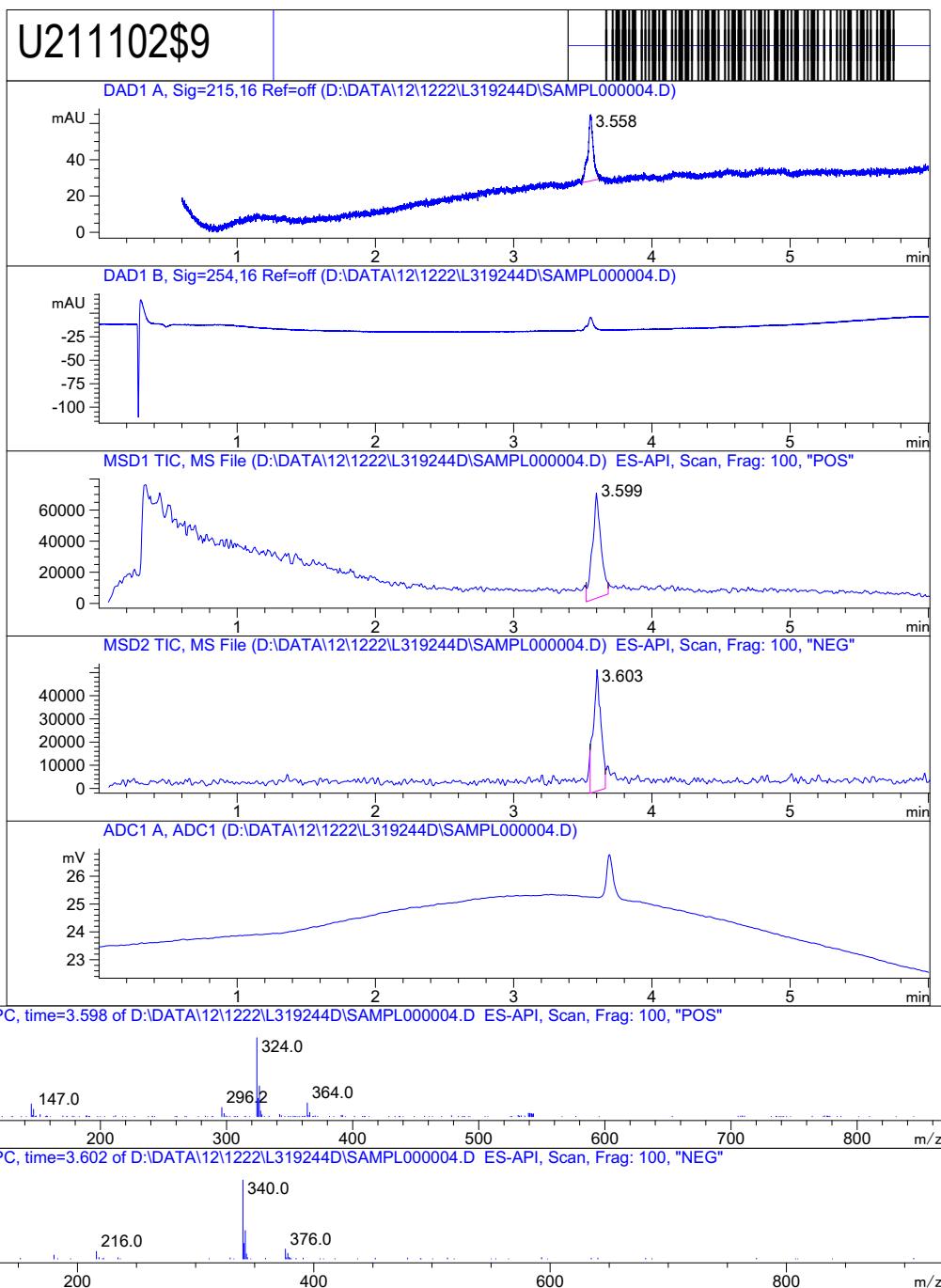
Z4497433897_

MaxPeak: 100.00%
Ret_Time: 3.558 min



Mol Wt 341.78
Exact Mass 341.04
Time Area%

1 3.558 100.00



Inj.Date 12/21/2020

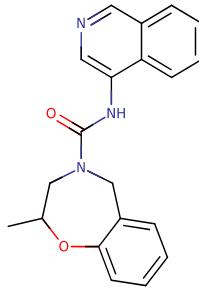
LT

- 4 -

Acq. Method C:\CHEM32\->

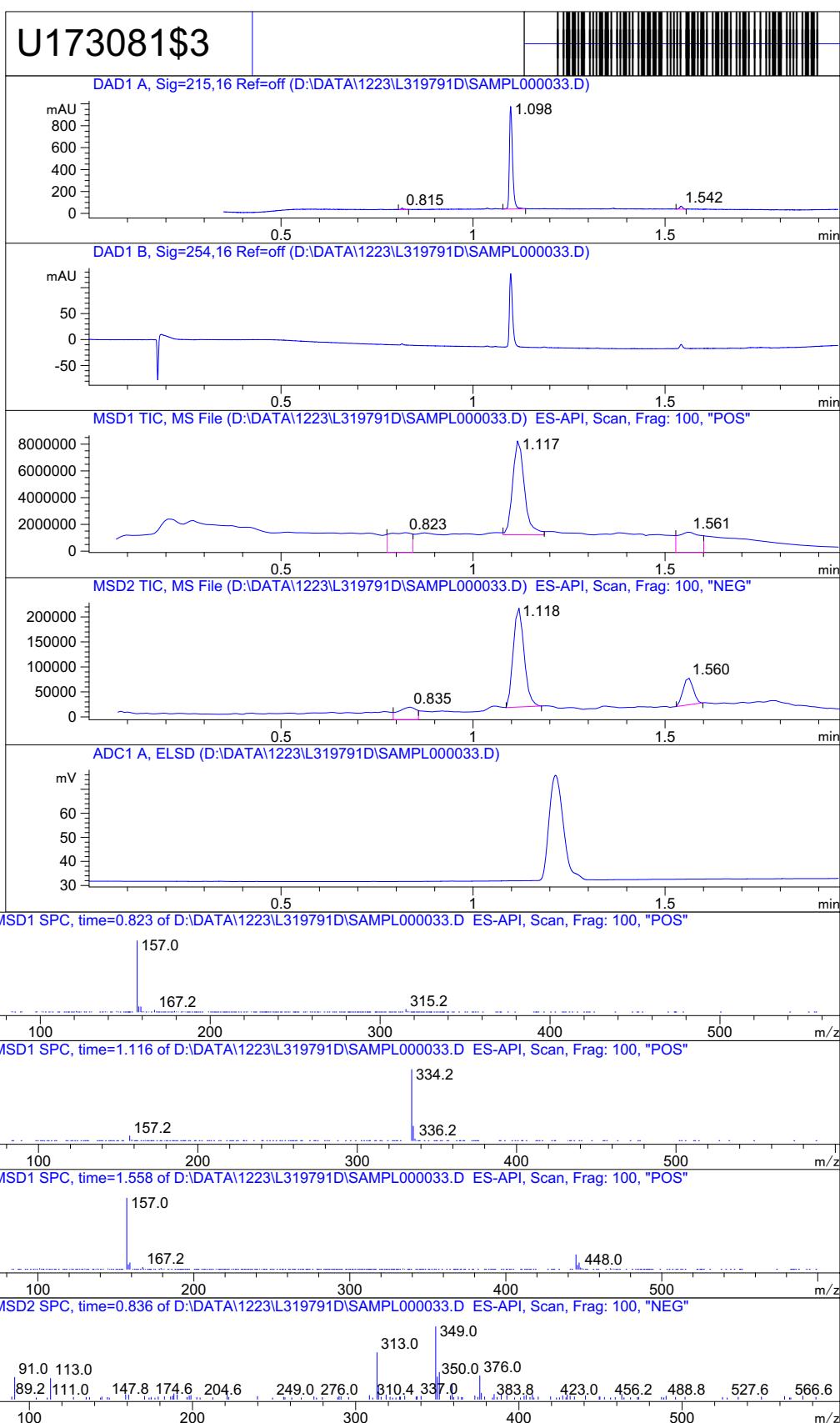
Z1866628450_

MaxPeak: 96.04%
Ret_Time: 1.098 min



Mol Wt 333.38
Exact Mass 333.17

#	Time	Area%
1	0.815	1.16
2	1.098	96.04
3	1.542	2.79



Inj.Date 12/23/2020

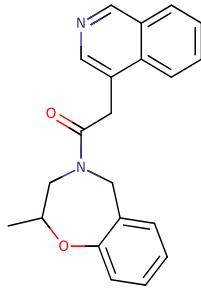
OA

-3-

Acq. Method C:\CHEM32\-> ->

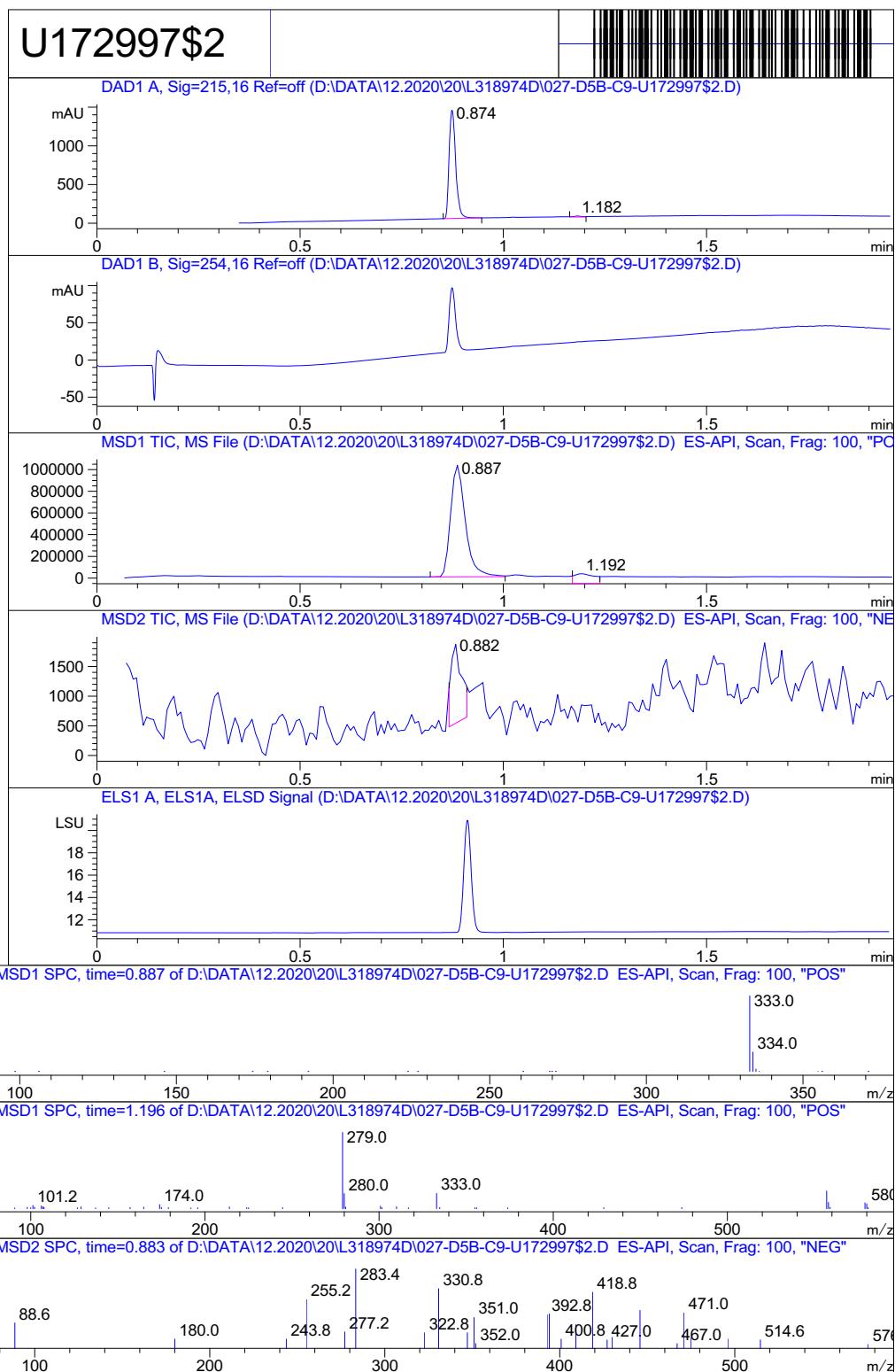
Z4872561628_

MaxPeak: 98.86%
Ret_Time: 0.874 min



Mol Wt 332.4
Exact Mass 332.18

#	Time	Area%
1	0.874	98.86
2	1.182	1.14



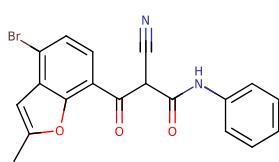
Inj.Date 12/19/2020

CH <invalid> 13

Acq. Method C:\Chem32\ ->

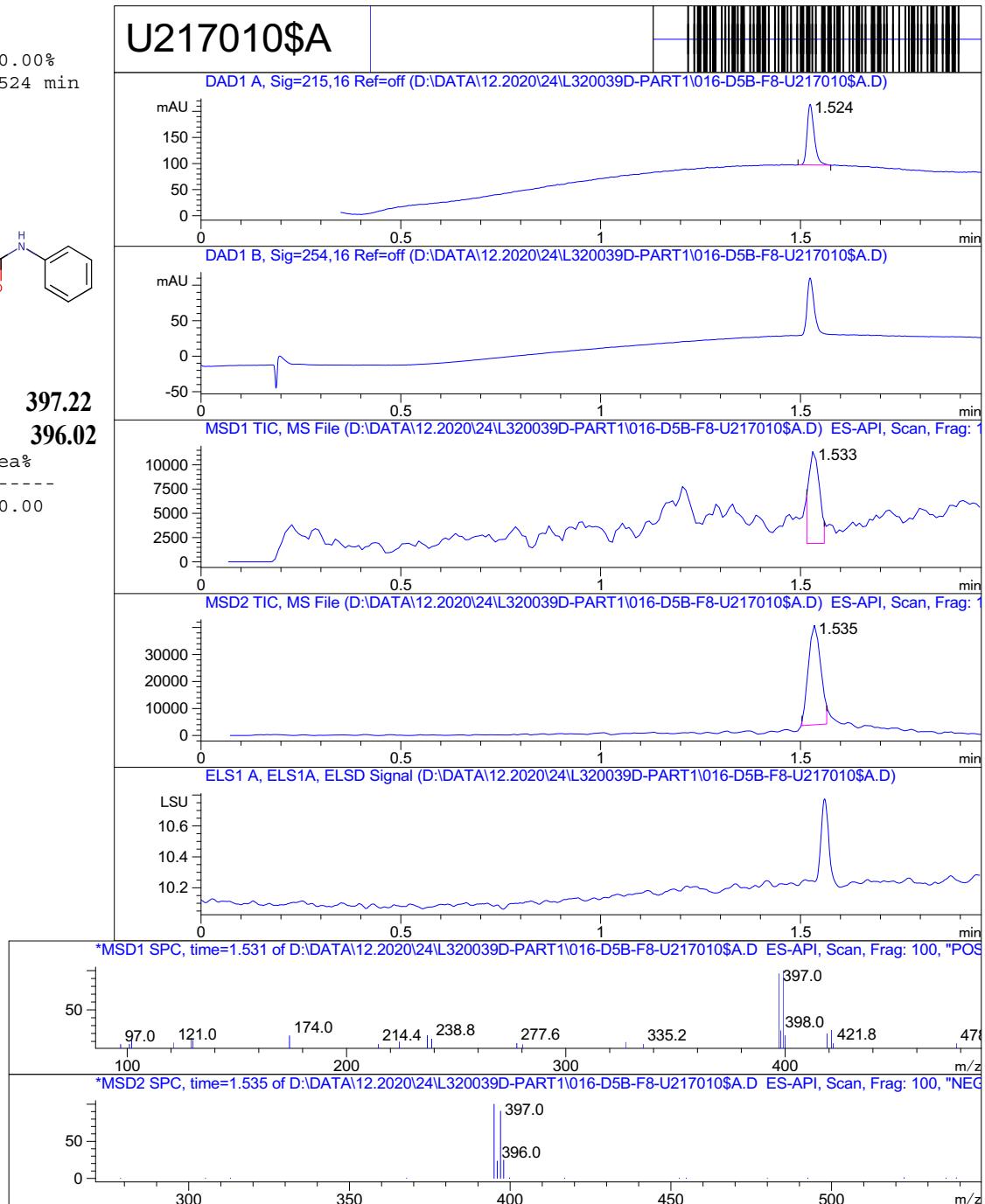
Z4872561612_

MaxPeak: 100.00%
Ret_Time: 1.524 min



Mol Wt 397.22
Exact Mass 396.02
Time Area%

1 1.524 100.00



Inj.Date 12/24/2020

CH <invalid> -15-

Acq. Method C:\Chem32\-> ->

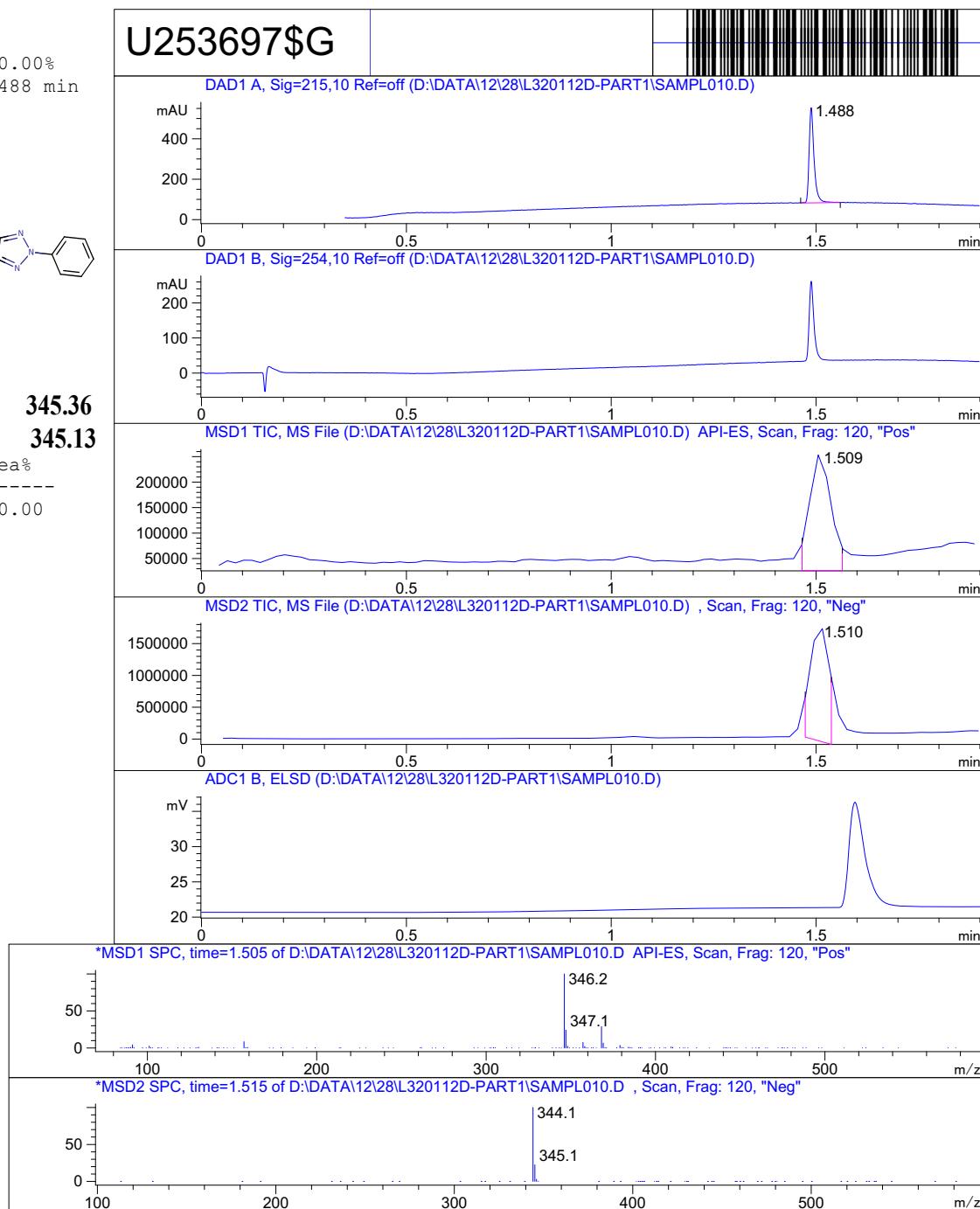
Z1798873704_

MaxPeak: 100.00%
Ret_Time: 1.488 min



Mol Wt 345.36
Exact Mass 345.13
Time Area%

1 1.488 100.00



Inj.Date 12/25/2020

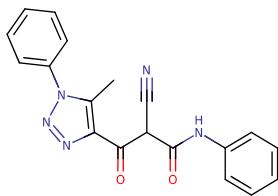
LB

-SL-

Acq. Method C:\HPCHEM\-> ->

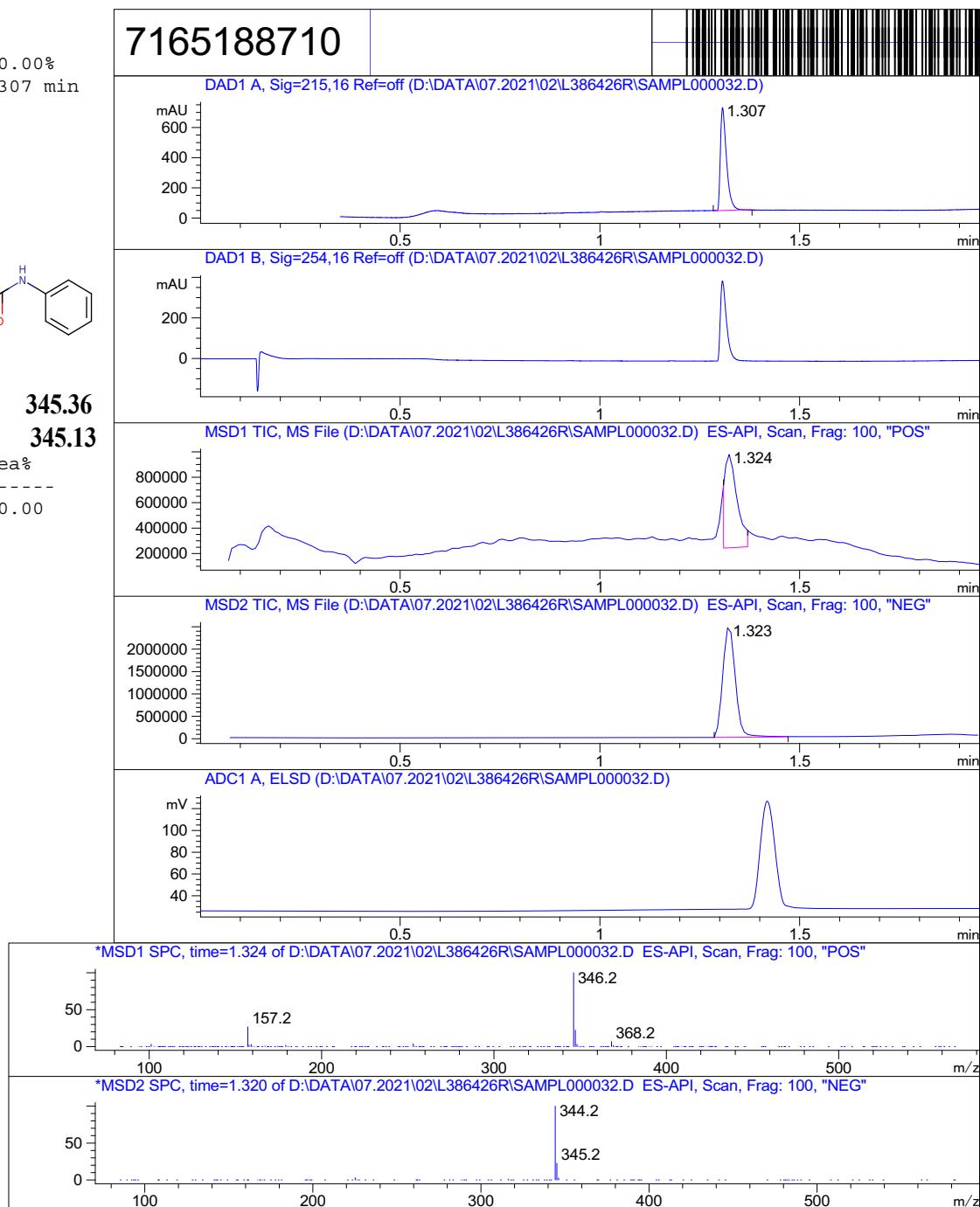
Z638691128_

MaxPeak: 100.00%
Ret_Time: 1.307 min



Mol Wt 345.36
Exact Mass 345.13
Time Area%

1 1.307 100.00

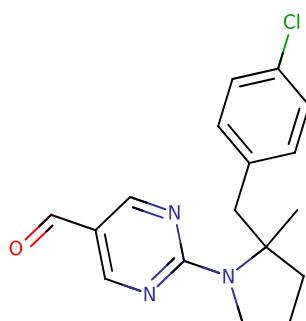


Inj.Date 7/2/2021

CH P2-C-01 -5- Acq. Method C:\CHEM32\-> ->

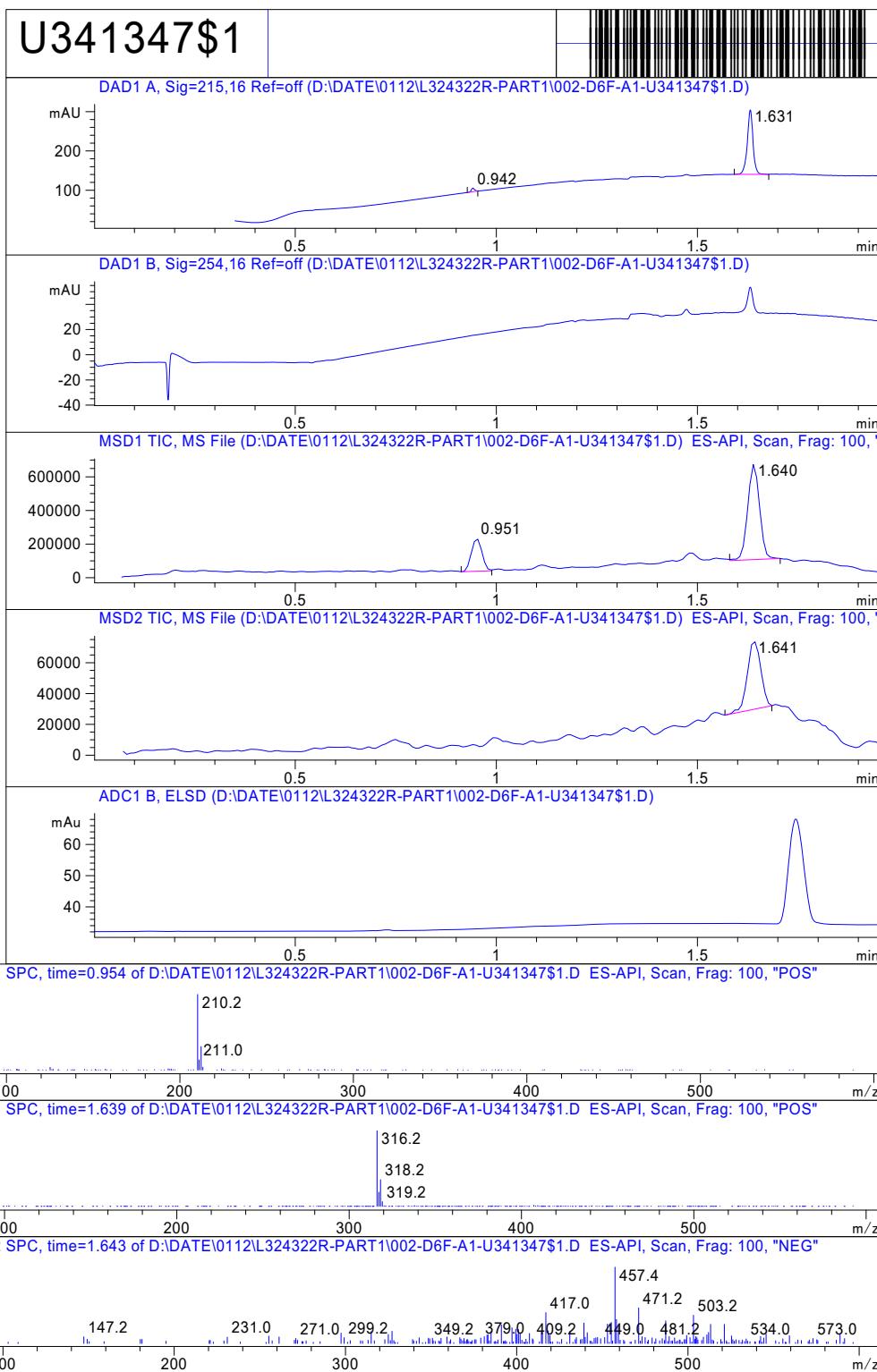
Z762207984_

MaxPeak: 97.01%
Ret_Time: 1.631 min



Mol Wt 315.8
Exact Mass 315.14
Time Area%

1 0.942 2.99
2 1.631 97.01



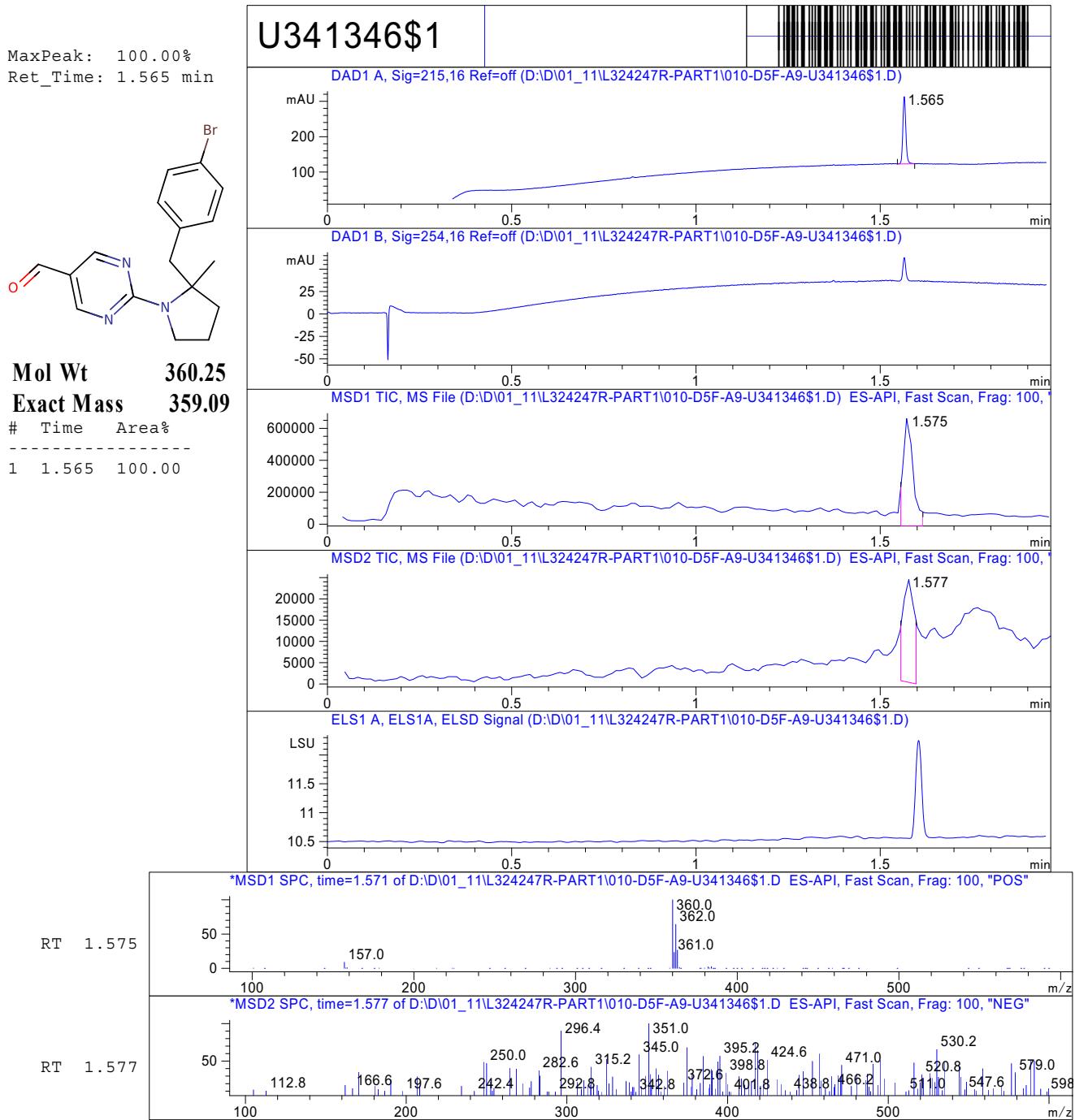
Inj.Date 1/12/2021

E

-10-

Acq. Method C:\Chem32\-> ->

Z4658847372_



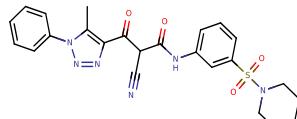
Inj.Date 1/11/2021

N

Acq. Method C:\Users\ -> ->

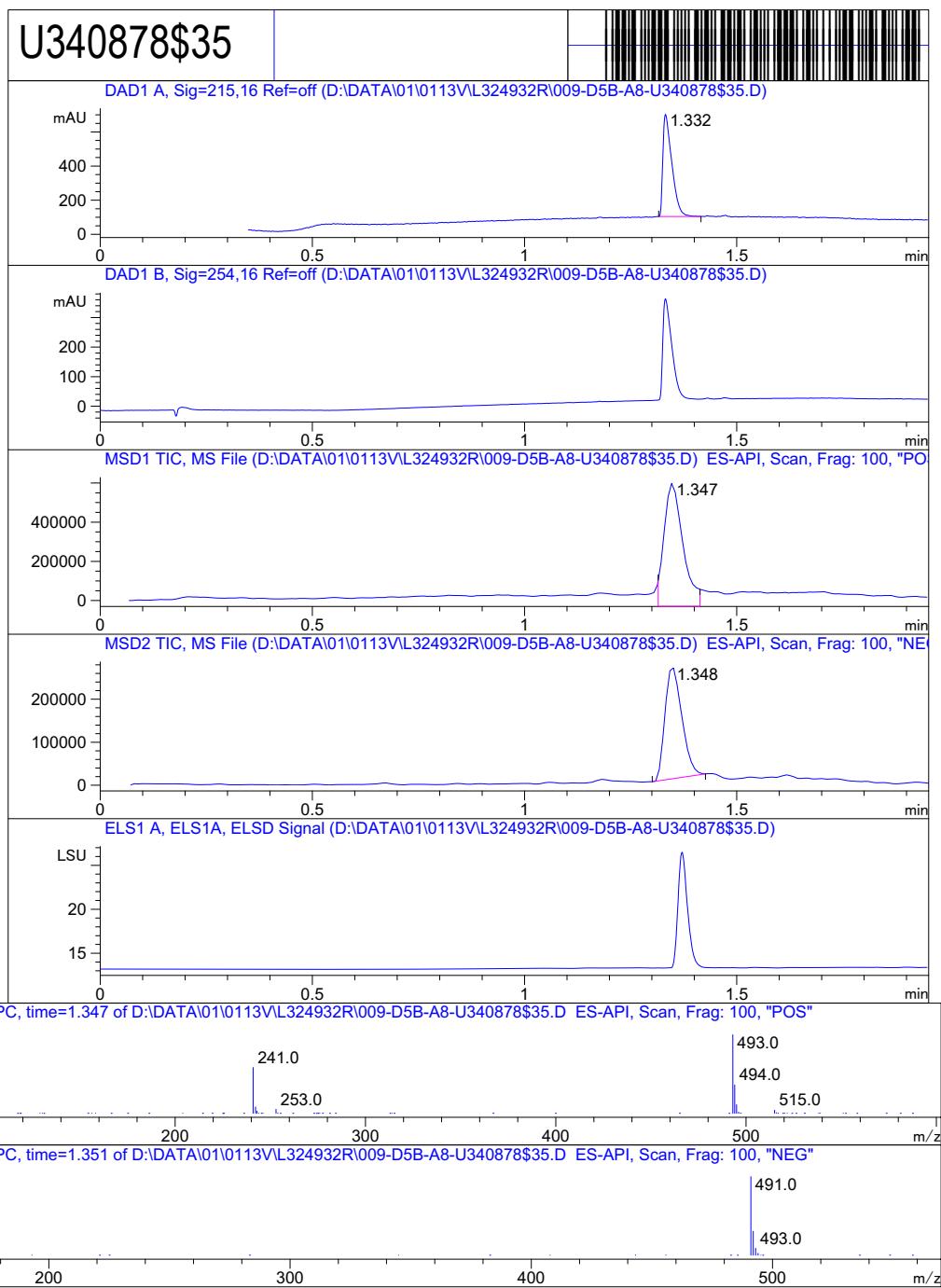
Z4658847373_

MaxPeak: 100.00%
Ret_Time: 1.332 min



Mol Wt 492.55
Exact Mass 492.17
Time Area%

1 1.332 100.00



Inj.Date 1/13/2021

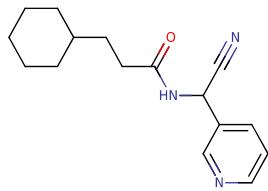
LT

-16-

Acq. Method C:\Chem32\ -> ->

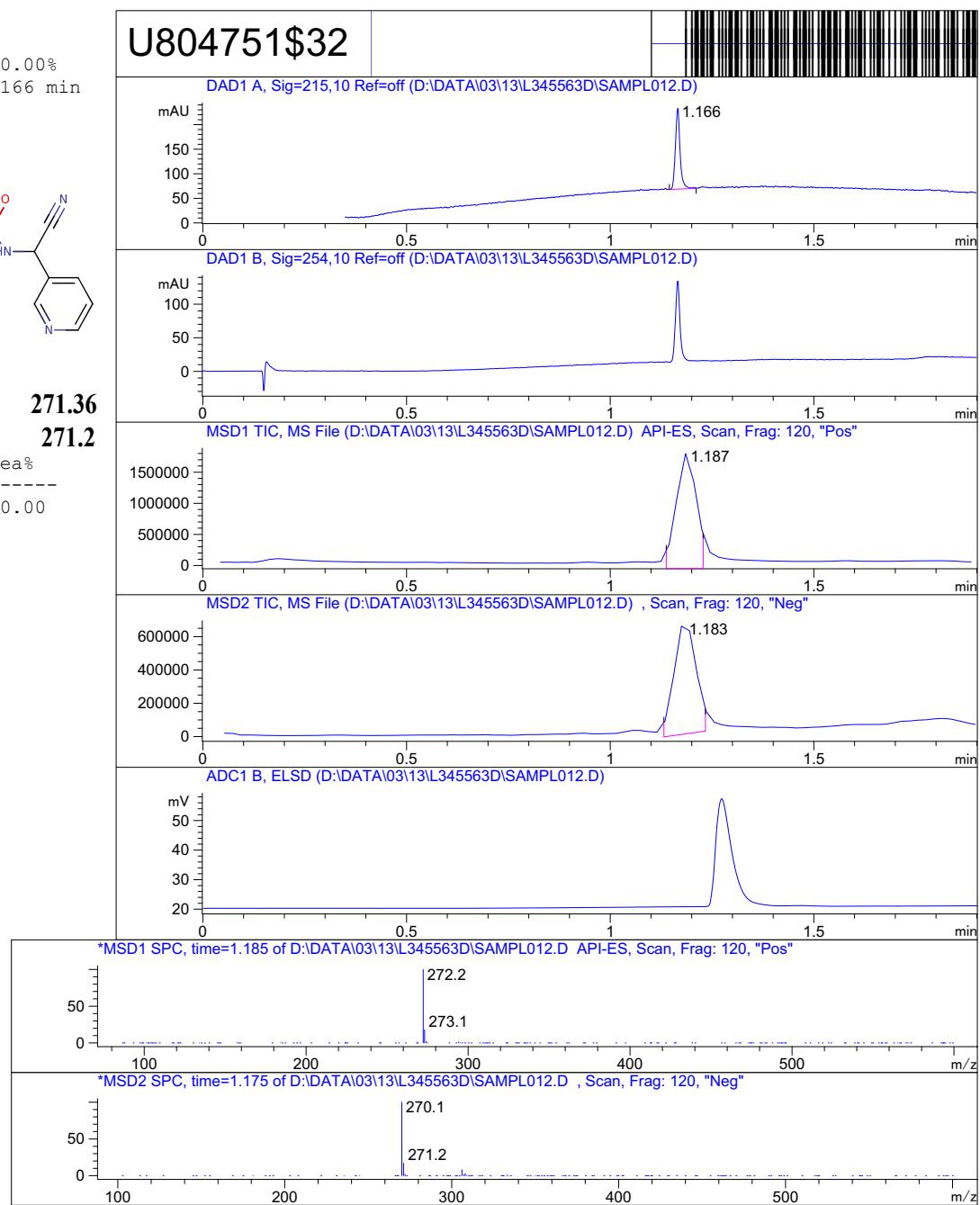
Z762213918_

MaxPeak: 100.00%
Ret_Time: 1.166 min



Mol Wt 271.36
Exact Mass 271.2
Time Area%

1 1.166 100.00



Inj.Date 3/13/2021

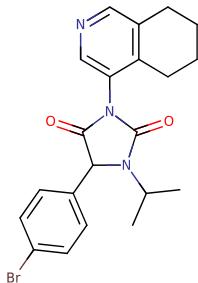
LB

-SL-

Acq. Method C:\HPCHEM\-> ->

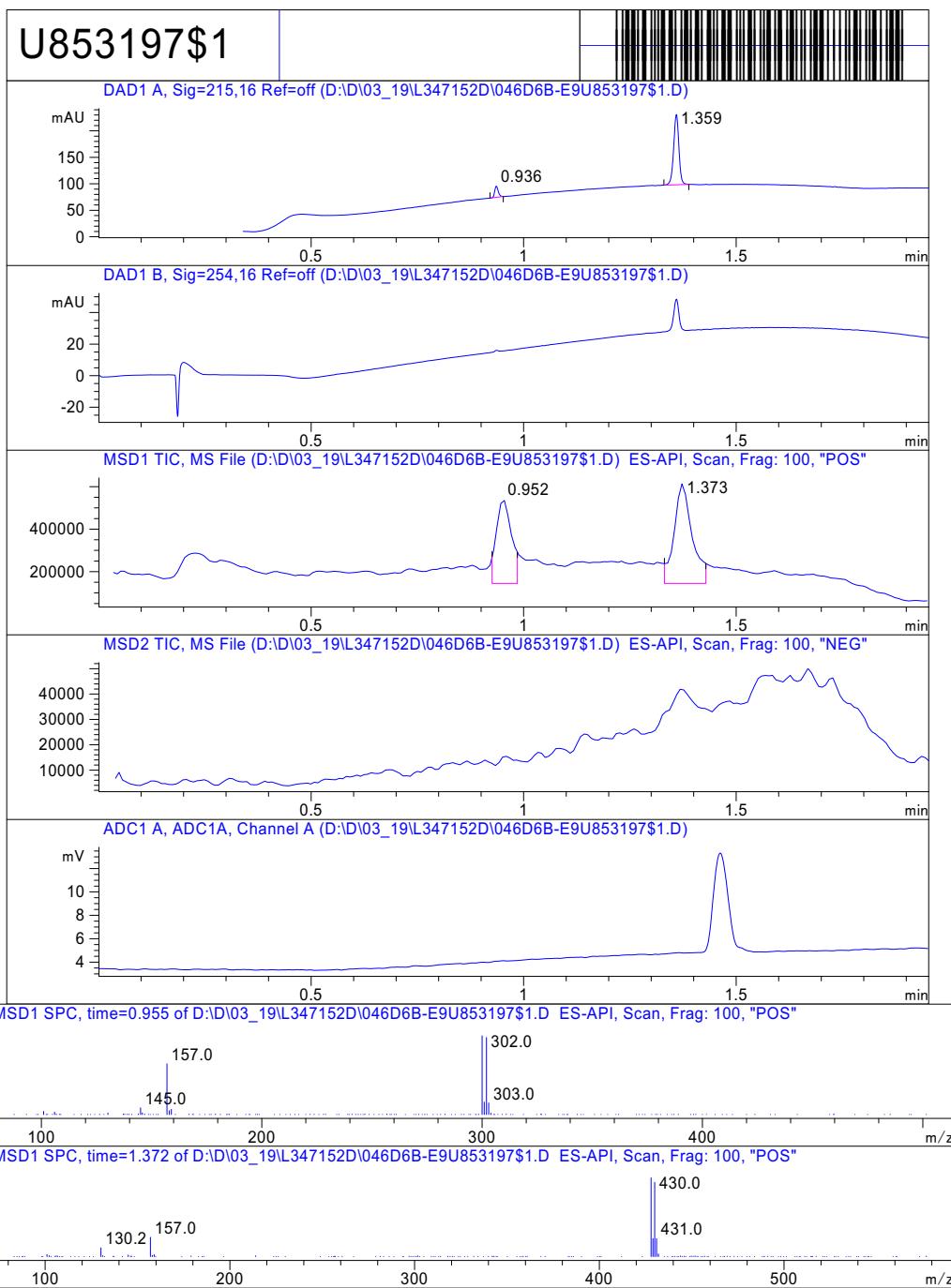
Z4466780750_

MaxPeak: 90.21%
Ret_Time: 1.359 min



Mol Wt 428.32
Exact Mass 429.12
Time Area%

1 0.936 9.79
2 1.359 90.21



Inj.Date 3/19/2021

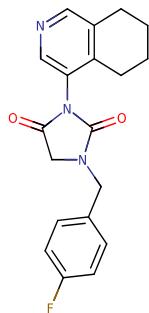
N

- 11 -

Acq. Method C:\Chem32\-> ->

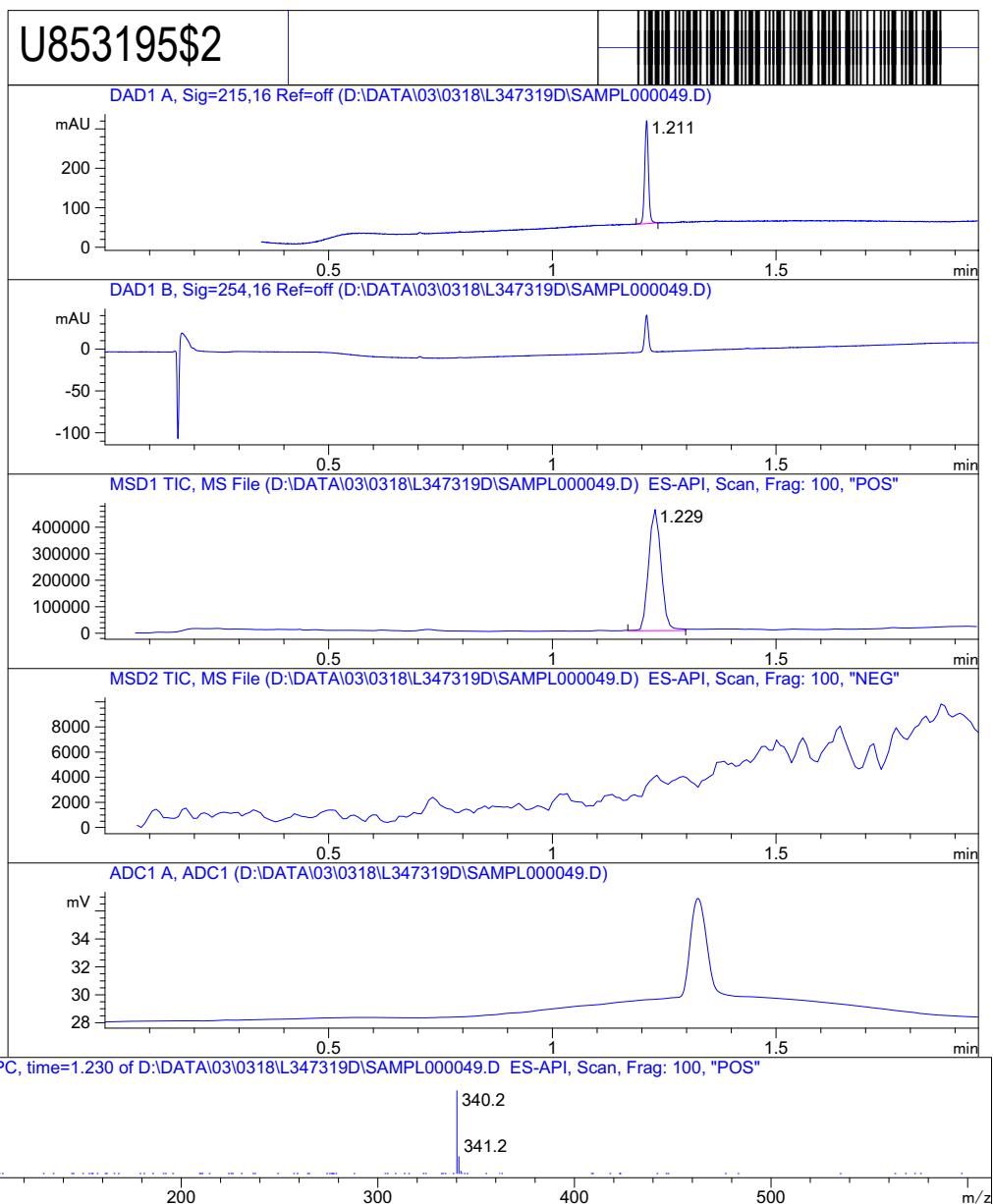
Z4929616252_

MaxPeak: 100.00%
Ret_Time: 1.211 min



Mol Wt 339.36
Exact Mass 339.16
Time Area%

1 1.211 100.00



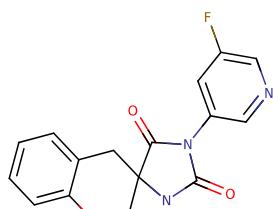
Inj.Date 3/18/2021

LT

- 4 - Acq. Method C:\CHEM32\-> ->

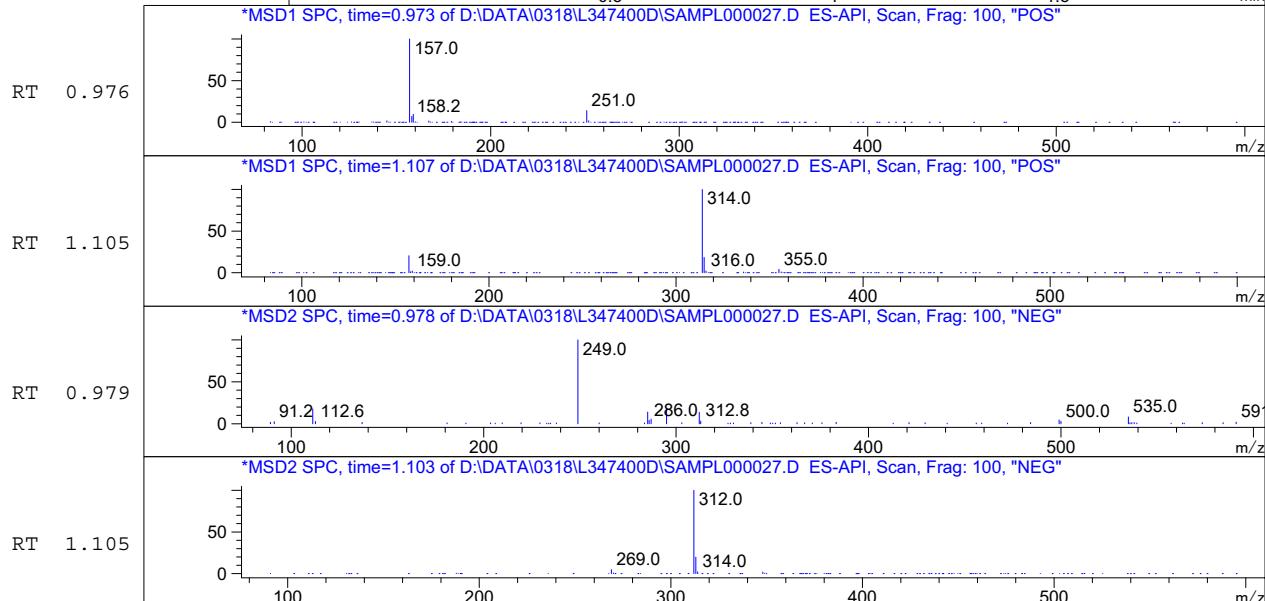
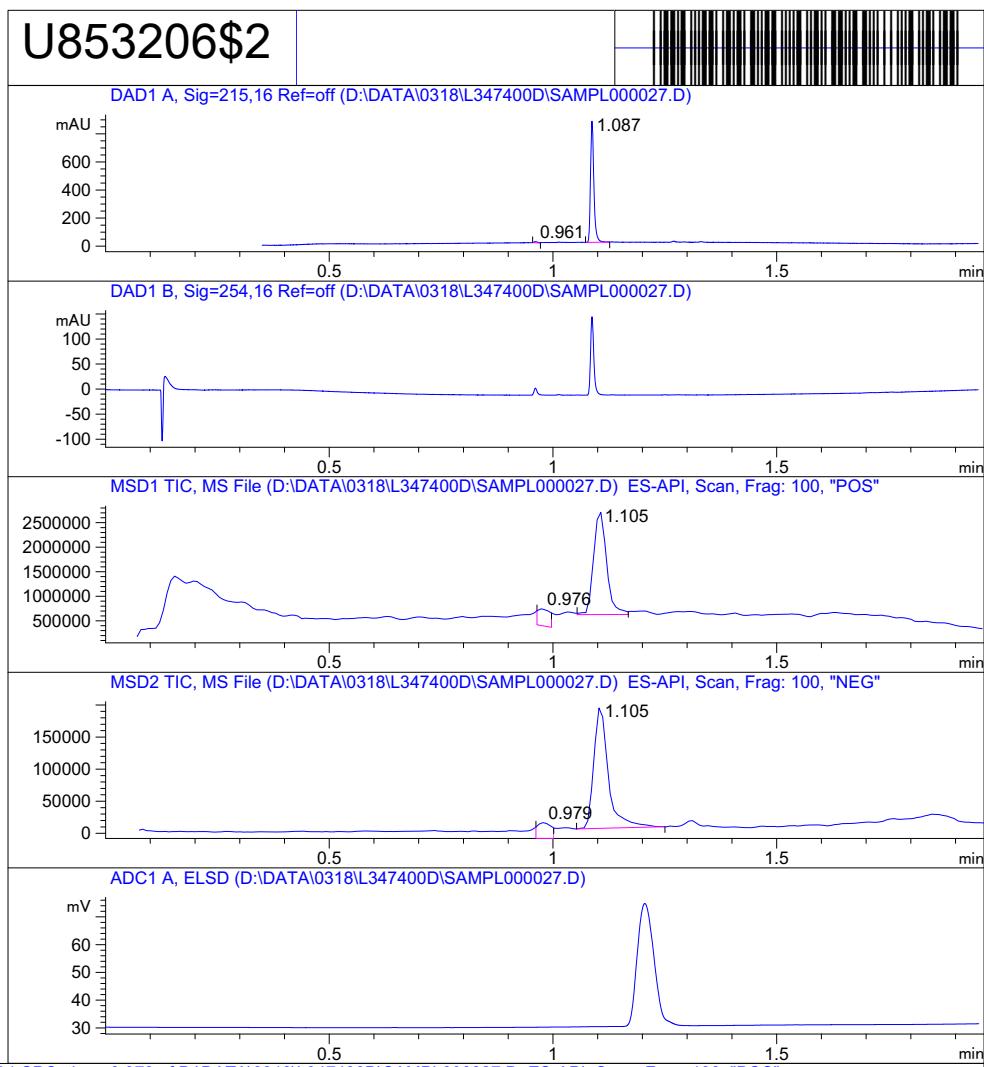
Z4929616328_

MaxPeak: 98.91%
Ret_Time: 1.087 min



Mol Wt 313.28
Exact Mass 313.09
Time Area%

1 0.961 1.09
2 1.087 98.91



Inj.Date 3/18/2021

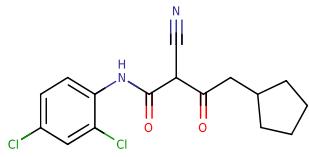
M

- 3 -

Acq. Method C:\CHEM32\ -> ->

Z4739648085_

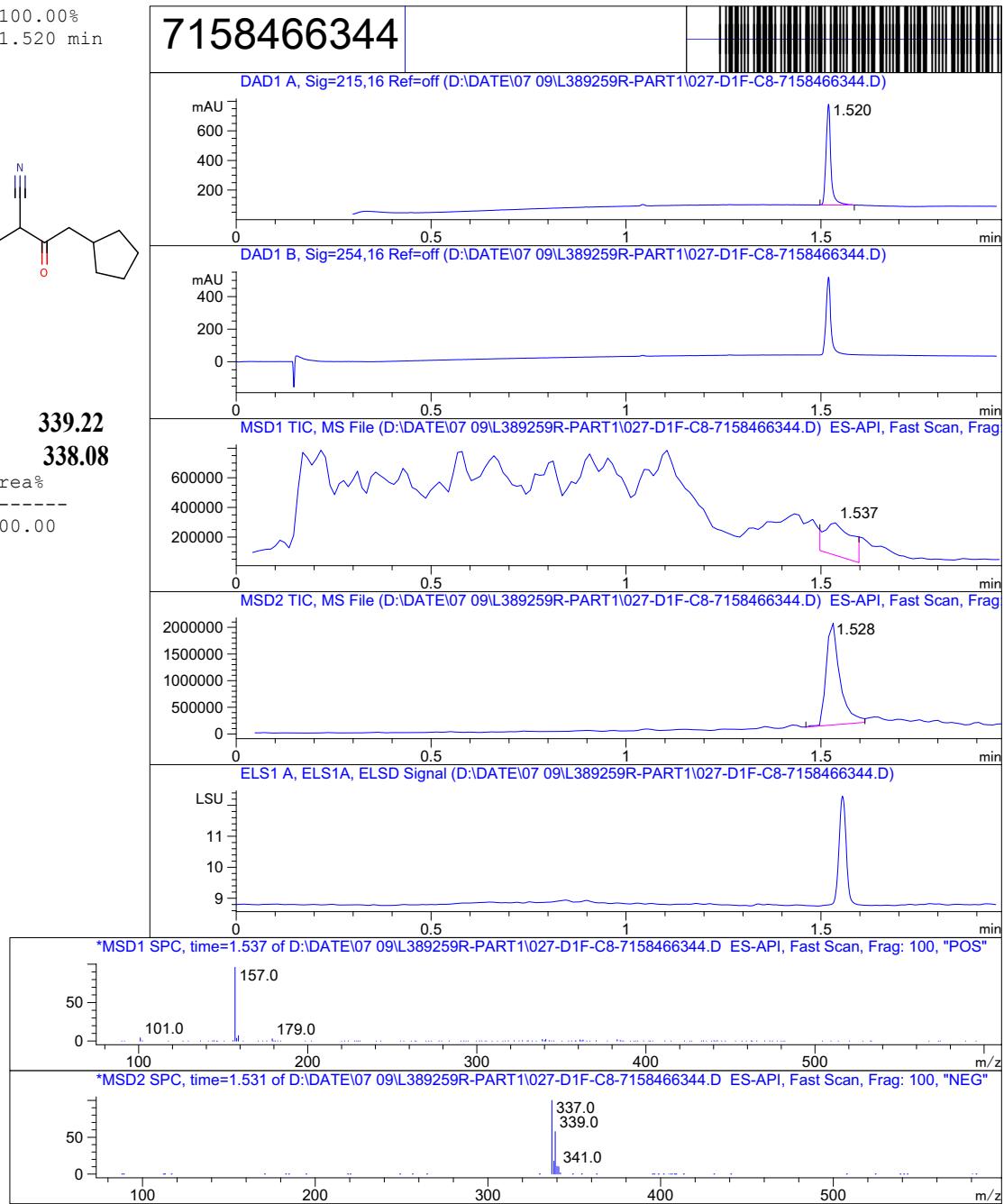
MaxPeak: 100.00%
Ret_Time: 1.520 min



7158466344

Mol Wt 339.22
Exact Mass 338.08
Time Area%

1 1.520 100.00



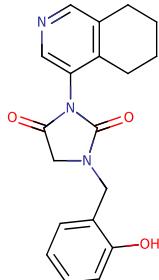
Inj.Date 7/9/2021

E

Acq. Method C:\Users\ -> ->

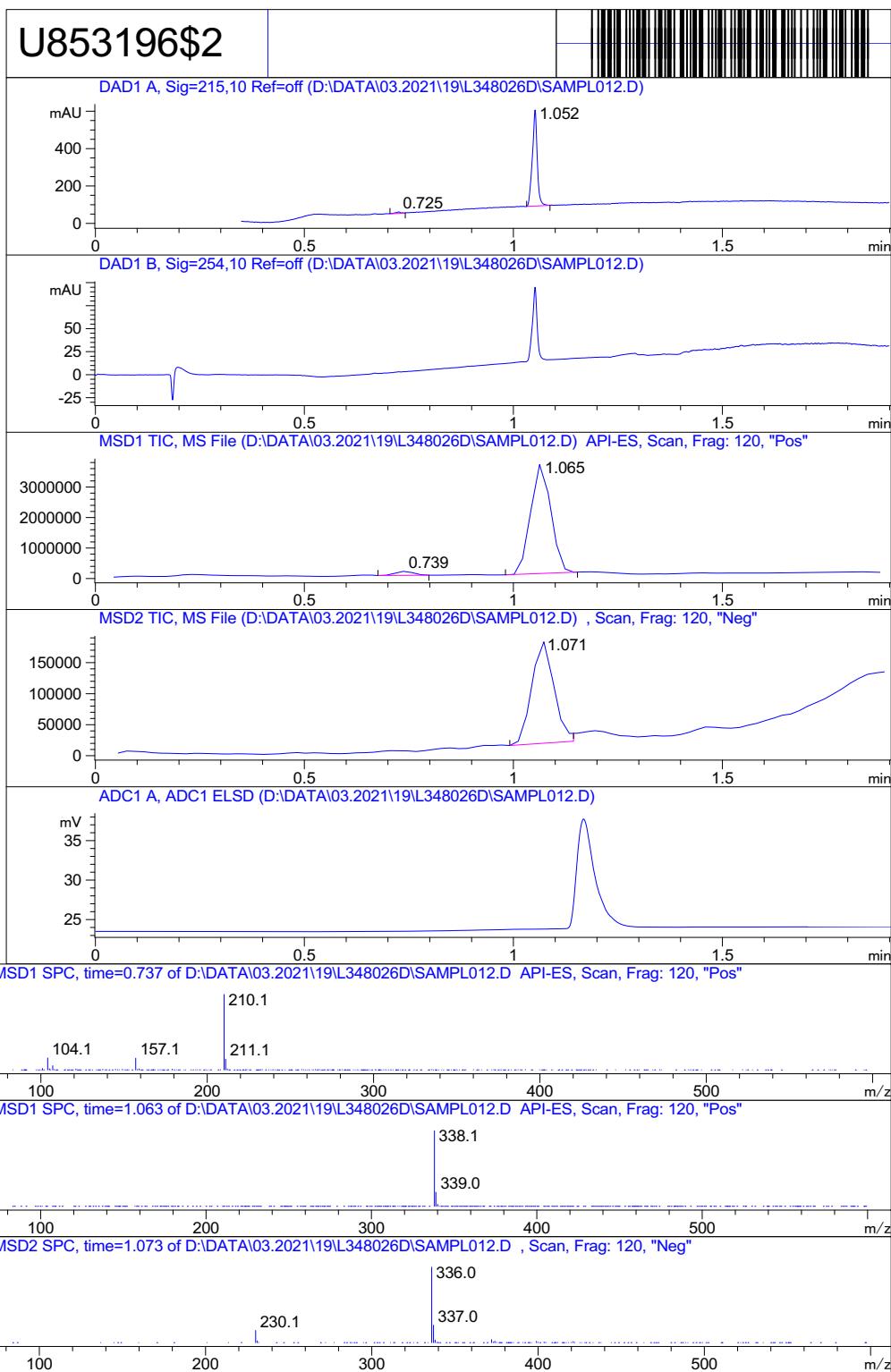
Z639519658_

MaxPeak: 98.16%
Ret_Time: 1.052 min



Mol Wt 337.37
Exact Mass 337.16
Time Area%

1 0.725 1.84
2 1.052 98.16

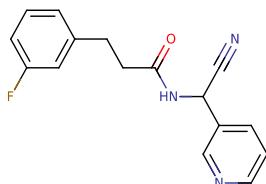


Inj.Date 3/19/2021

CH P2-B-03 -VL- Acq. Method C:\HPCHEM\-> ->

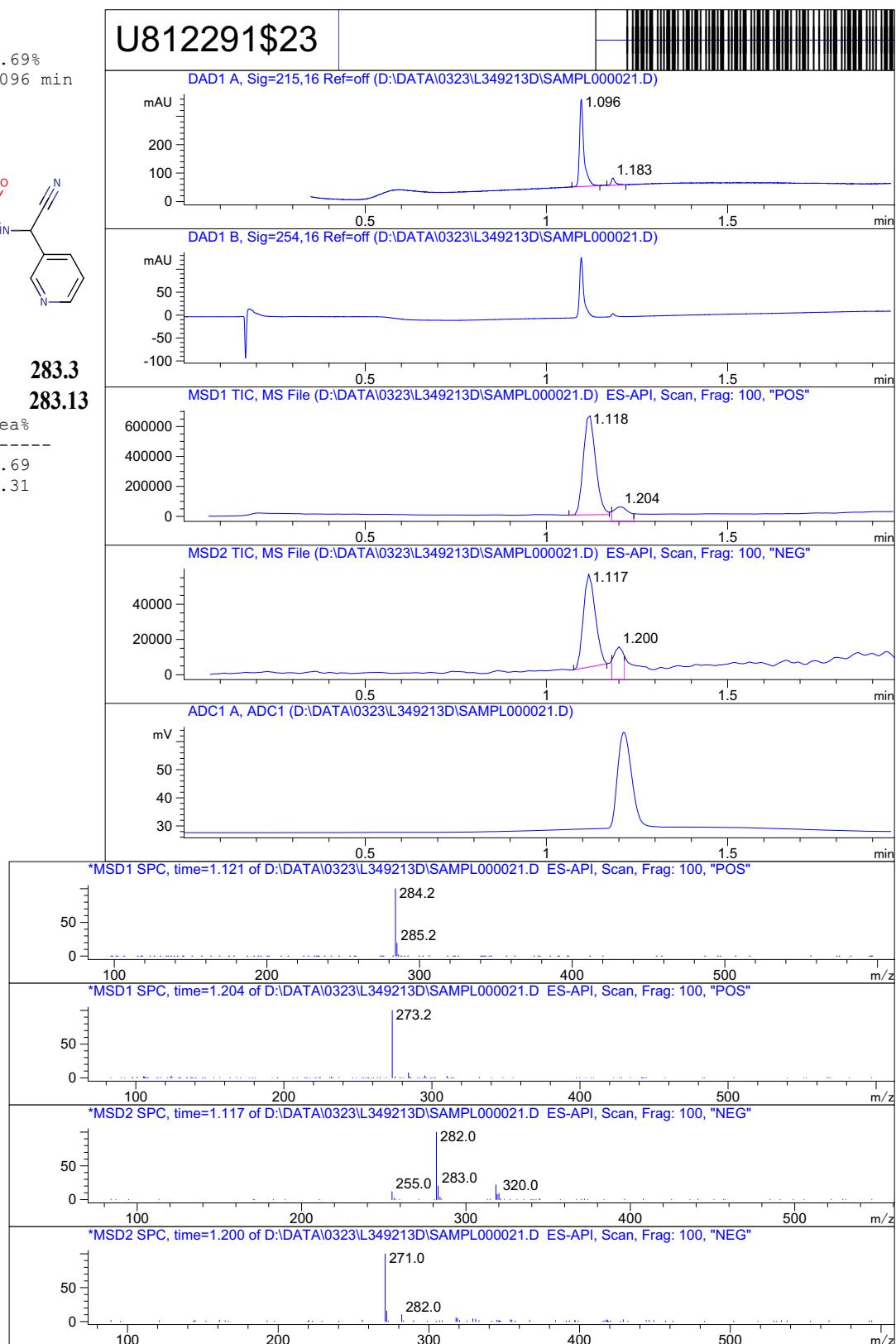
Z4929616577_

MaxPeak: 92.69%
Ret_Time: 1.096 min



Mol Wt 283.3
Exact Mass 283.13
Time Area%

1 1.096 92.69
2 1.183 7.31



Inj.Date 3/23/2021

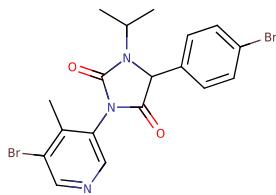
OA

- 4 -

Acq. Method C:\CHEM32\-> ->

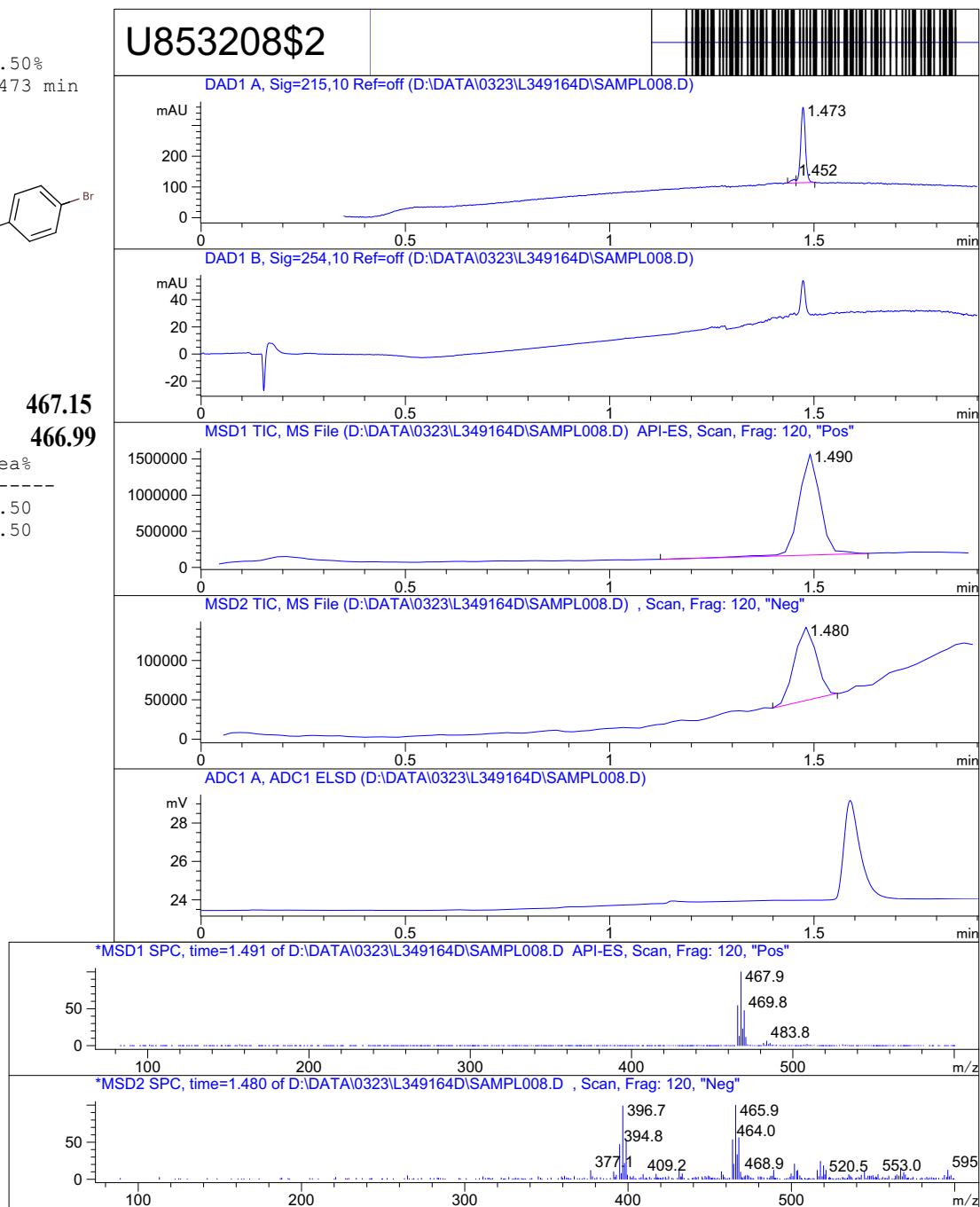
Z4934489626_

MaxPeak: 95.50%
Ret_Time: 1.473 min



Mol Wt 467.15
Exact Mass 466.99
Time Area%

1 1.452 4.50
2 1.473 95.50



Inj.Date 3/23/2021

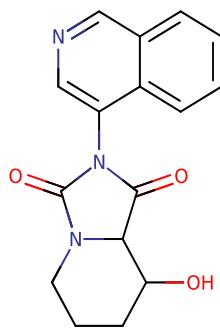
OA

-VL-

Acq. Method C:\HPCHEM\-> ->

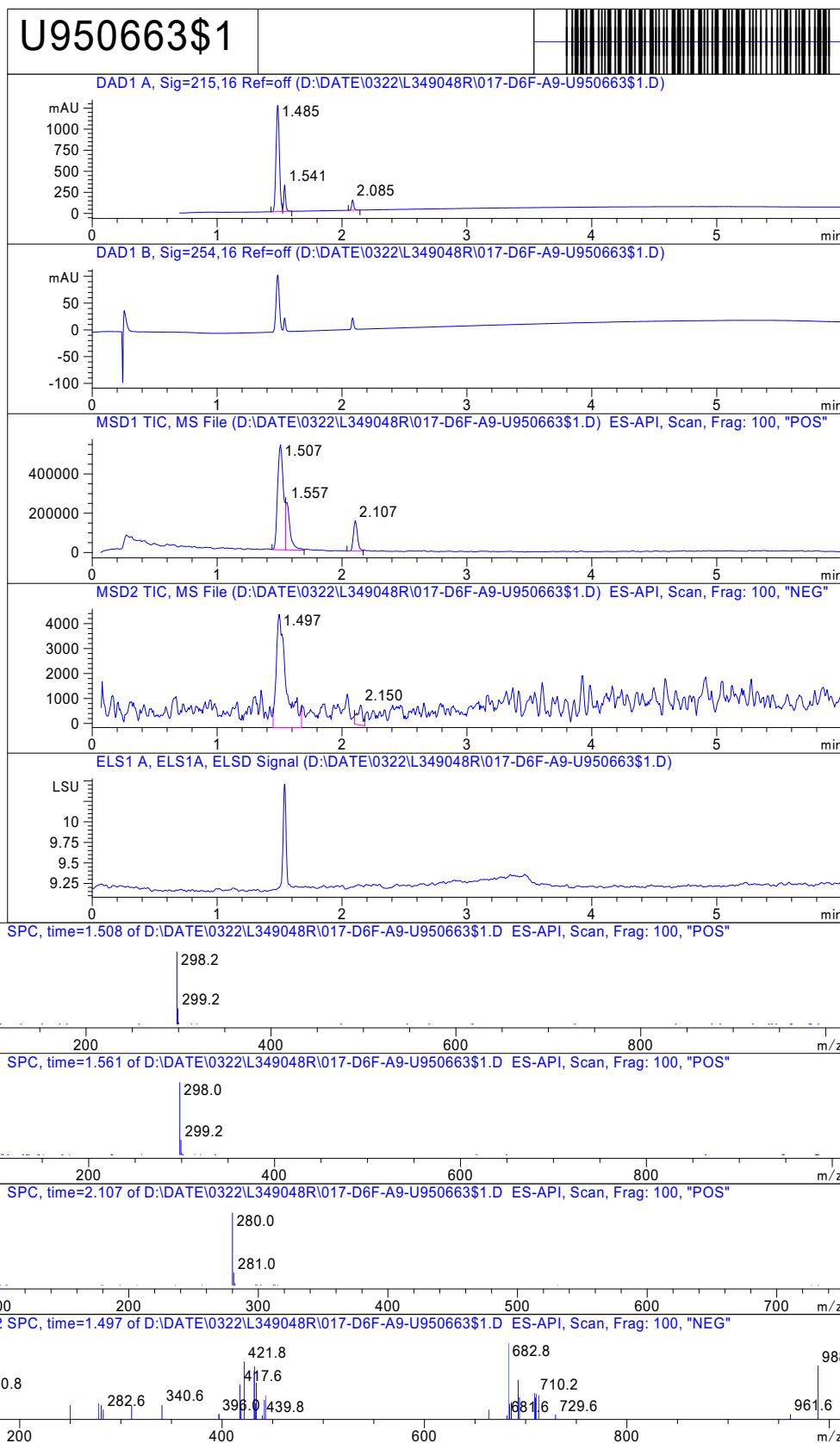
Z4927215427_

MaxPeak: 83.37%
Ret_Time: 1.485 min



Mol Wt 297.31
Exact Mass 297.12
Time Area%

1 1.485 83.37
2 1.541 11.66
3 2.085 4.97



Inj.Date 3/22/2021

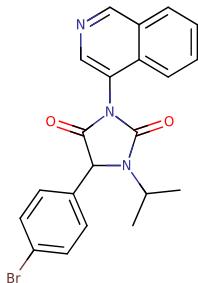
E

13

Acq. Method C:\Chem32\-> ->

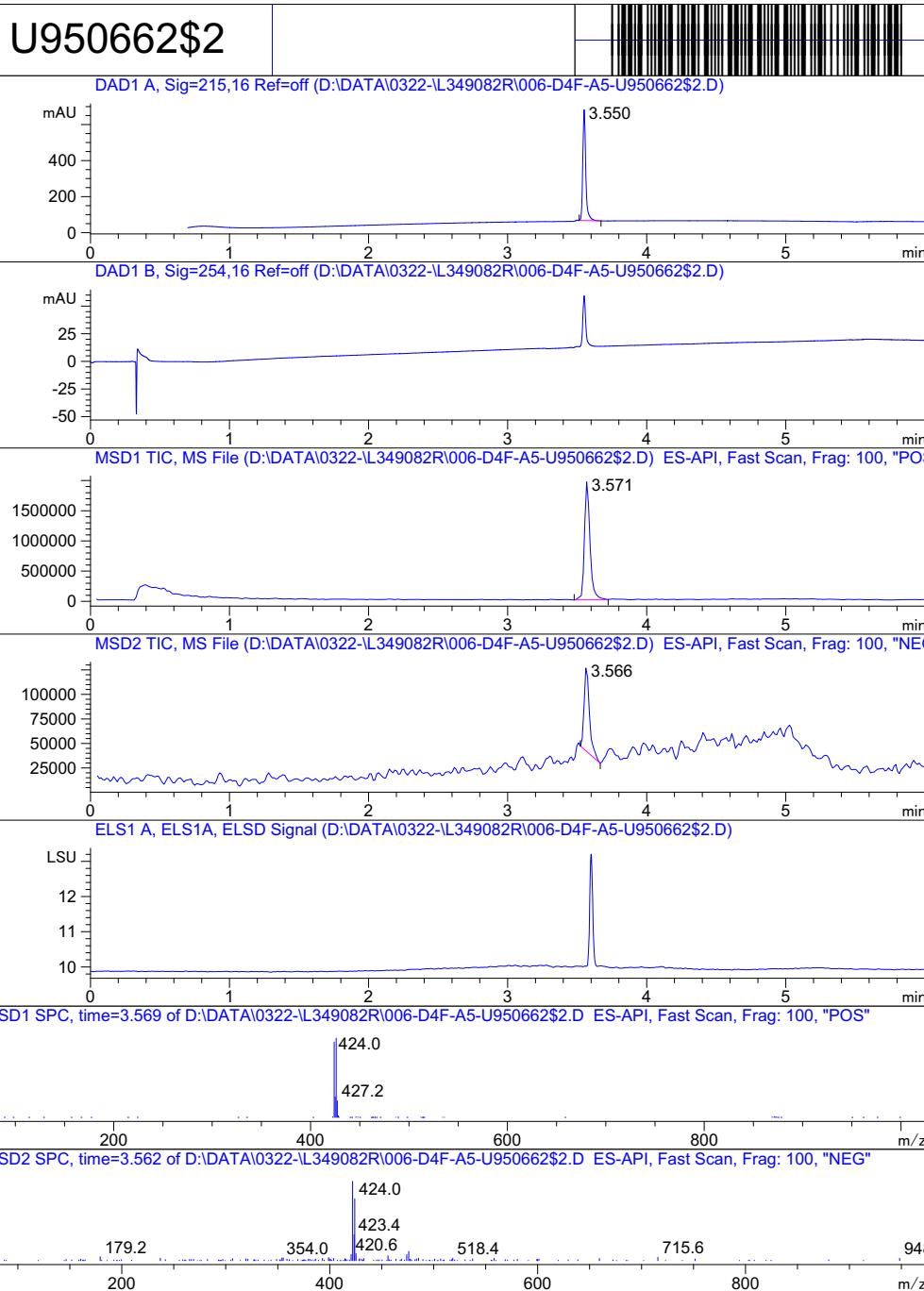
Z4929616088_

MaxPeak: 100.00%
Ret_Time: 3.550 min



Mol Wt 424.29
Exact Mass 425.08
Time Area%

1 3.550 100.00



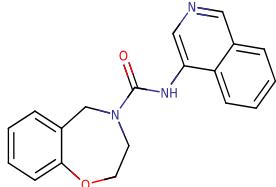
Inj.Date 3/22/2021

OA

Acq. Method C:\Users\ -> ->

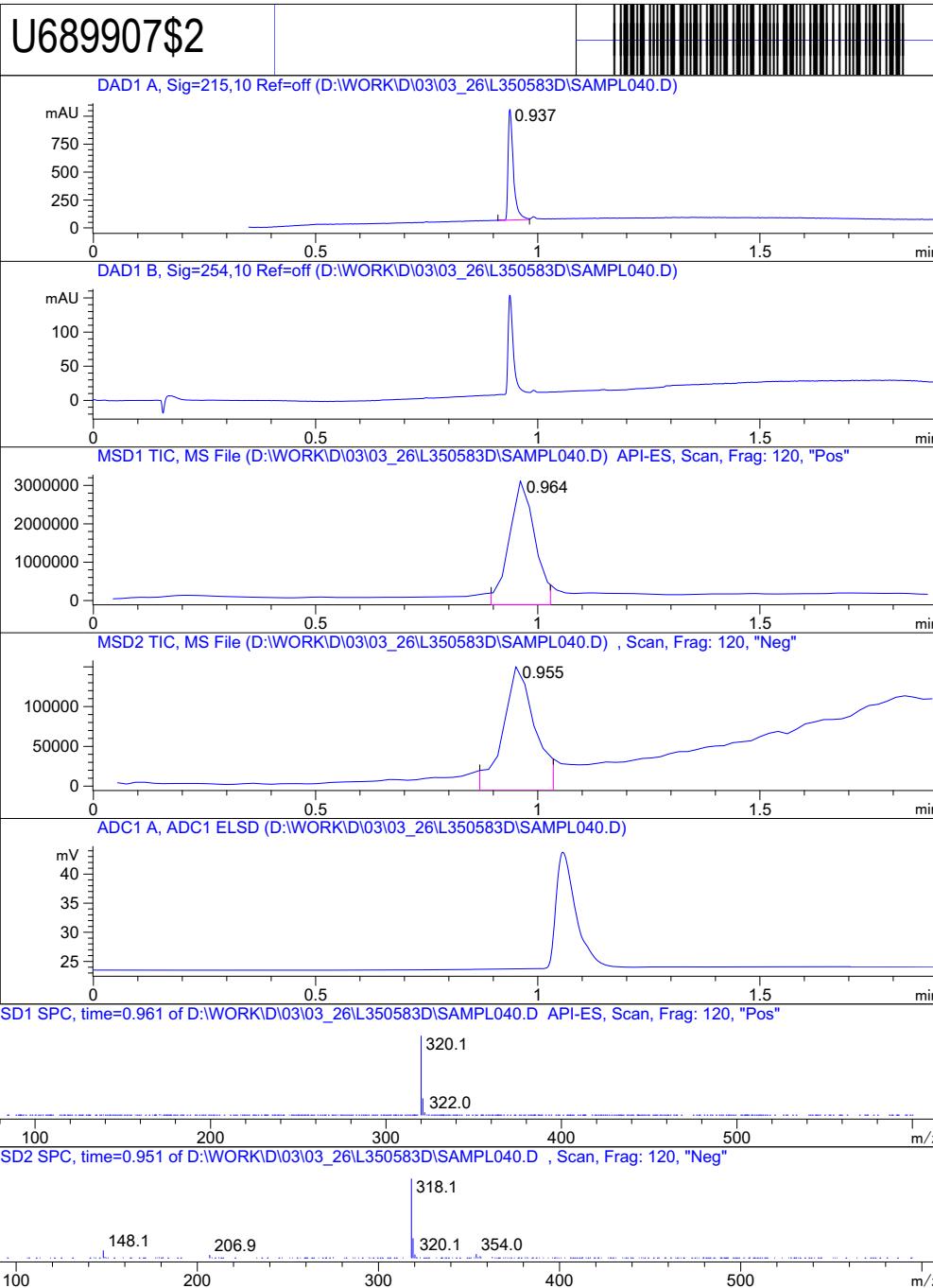
Z4925123630_

MaxPeak: 100.00%
Ret_Time: 0.937 min



Mol Wt 319.36
Exact Mass 319.15
Time Area%

1 0.937 100.00



Inj.Date 3/26/2021

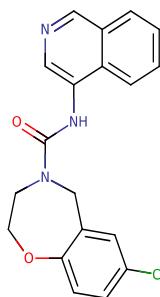
K

-VL-

Acq. Method C:\HPCHEM\ -> ->

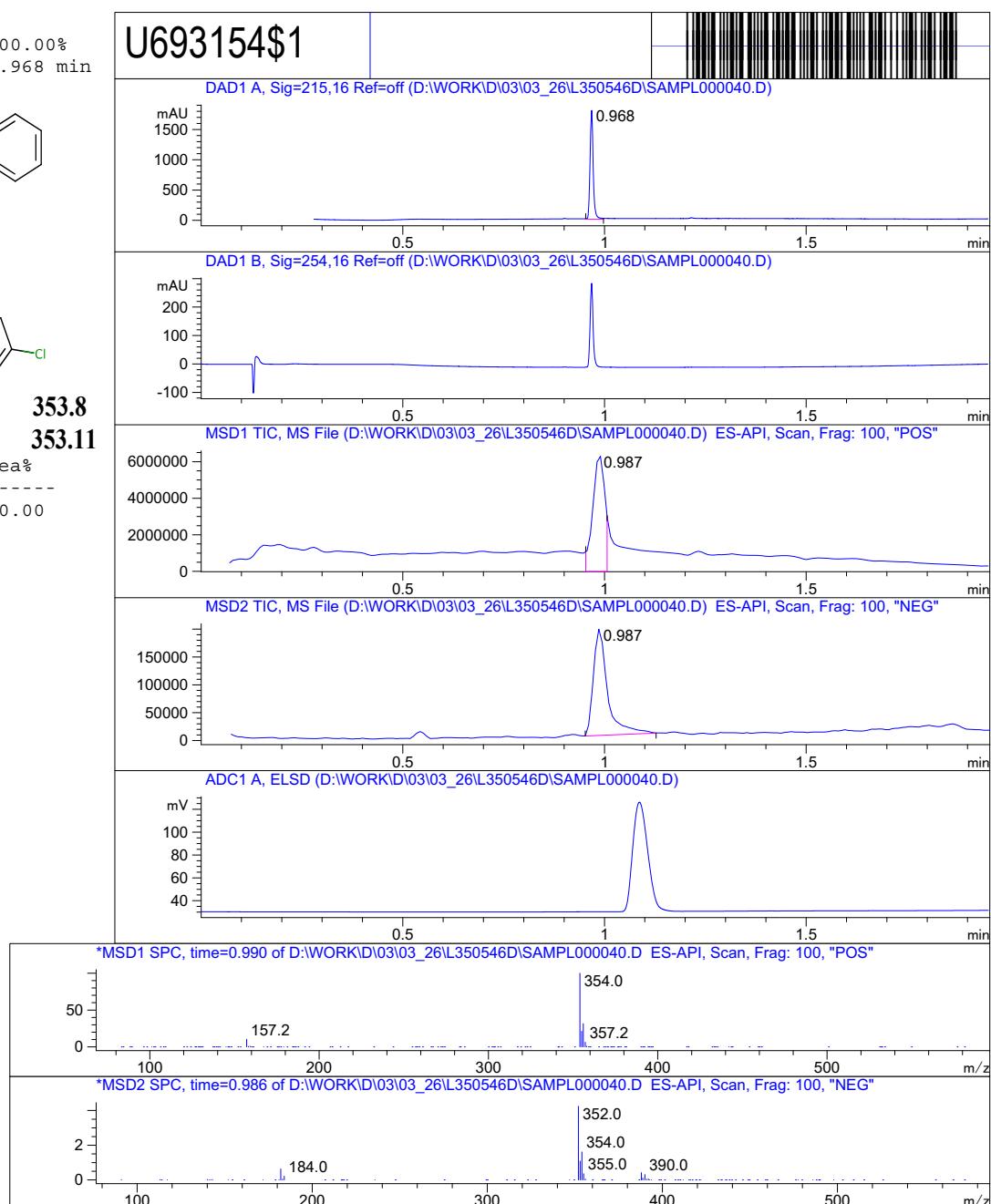
Z1531604940_

MaxPeak: 100.00%
Ret_Time: 0.968 min

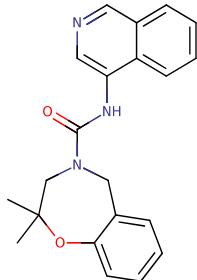


Mol Wt 353.8
Exact Mass 353.11

#	Time	Area%
1	0.968	100.00

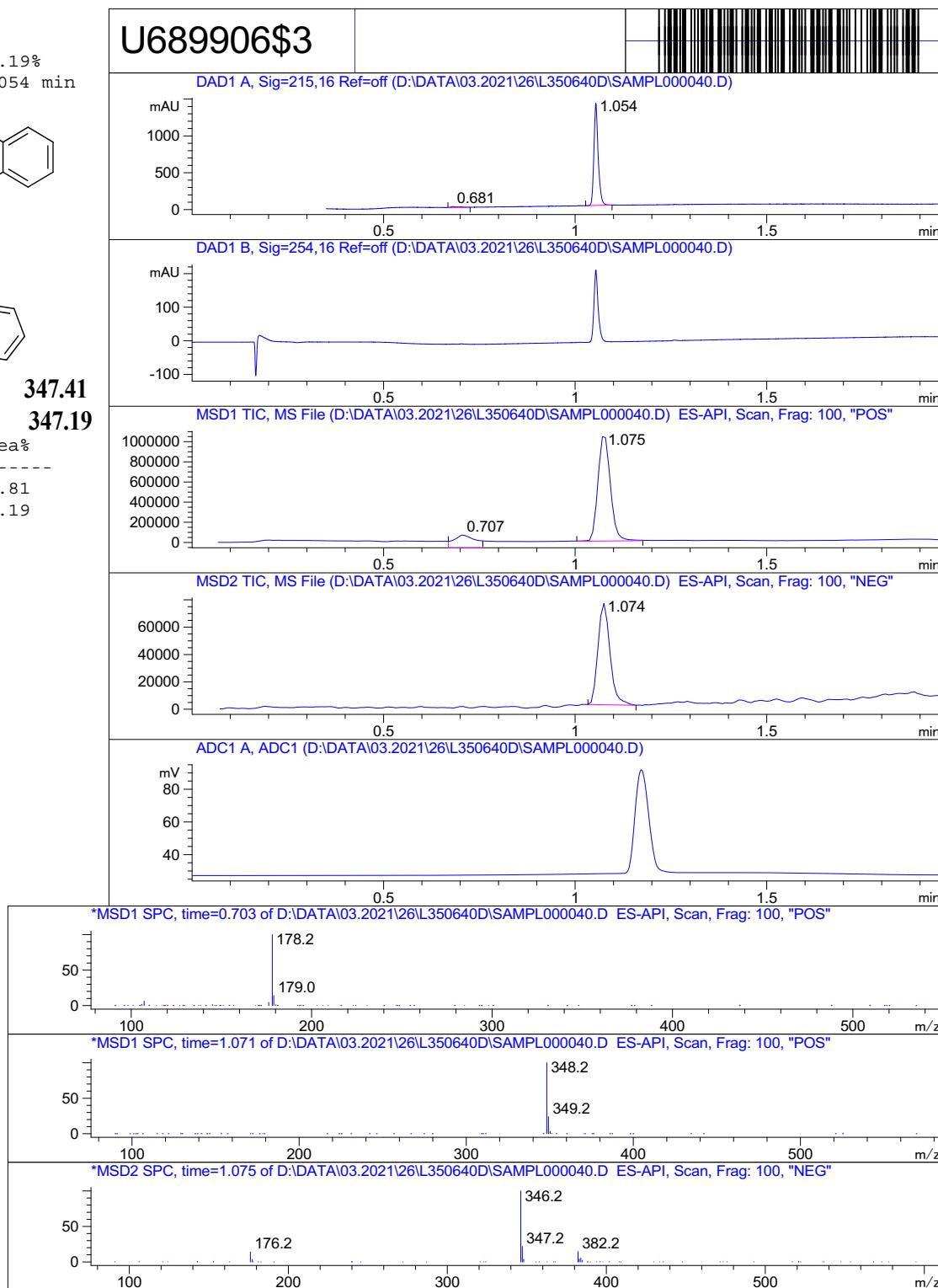


MaxPeak: 98.19%
Ret_Time: 1.054 min



Mol Wt 347.41
Exact Mass 347.19
Time Area%

1 0.681 1.81
2 1.054 98.19



Inj.Date 3/26/2021

CH

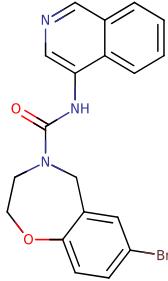
P2-E-04

- 4 -

Acq. Method C:\CHEM32\-> ->

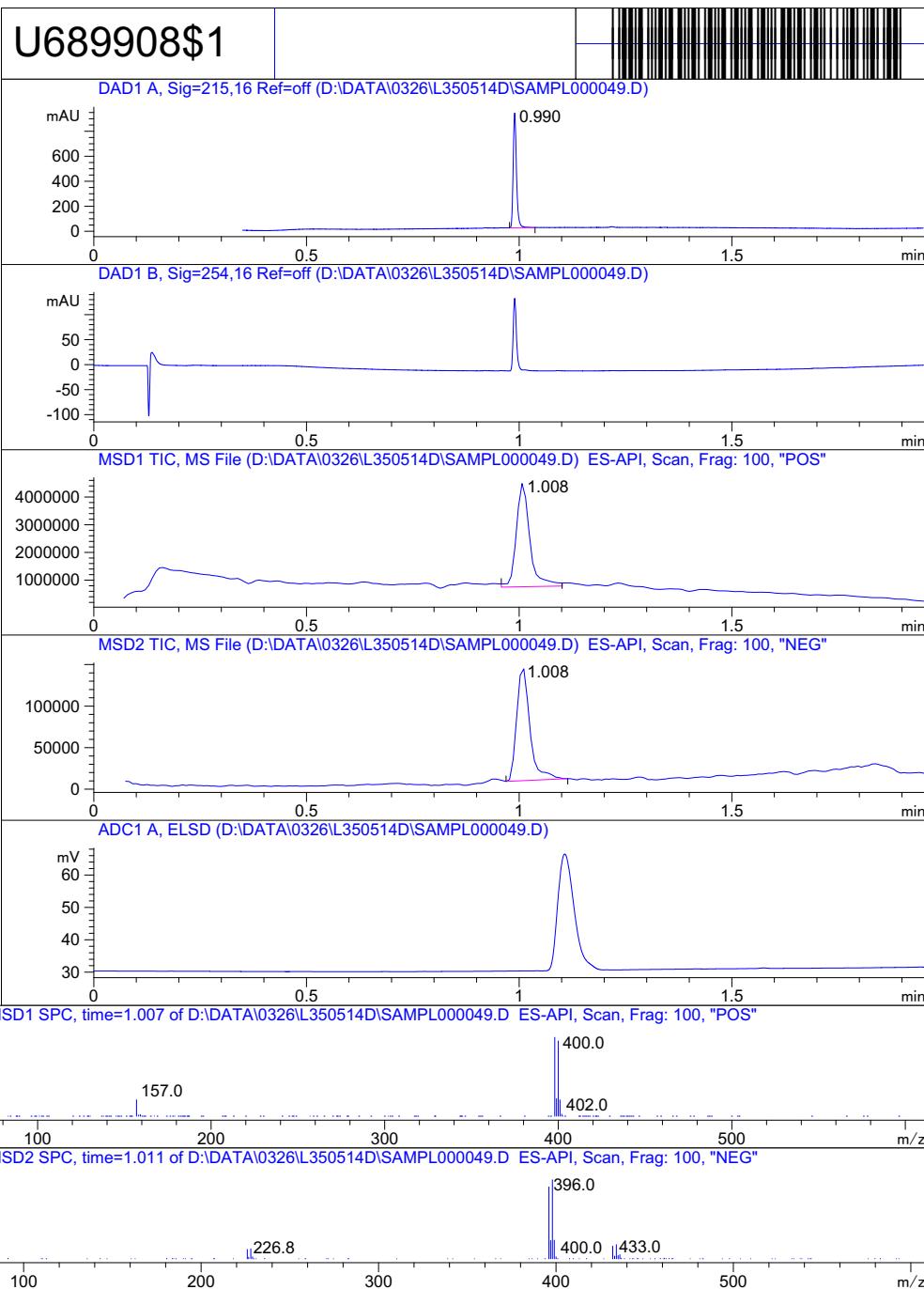
Z2150969870_

MaxPeak: 100.00%
Ret_Time: 0.990 min



Mol Wt 398.25
Exact Mass 397.06
Time Area%

1 0.990 100.00



Inj.Date 3/26/2021

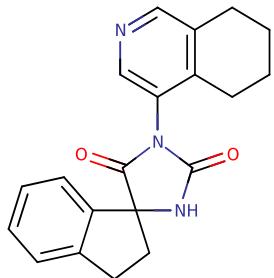
OA

-3-

Acq. Method C:\CHEM32\-> ->

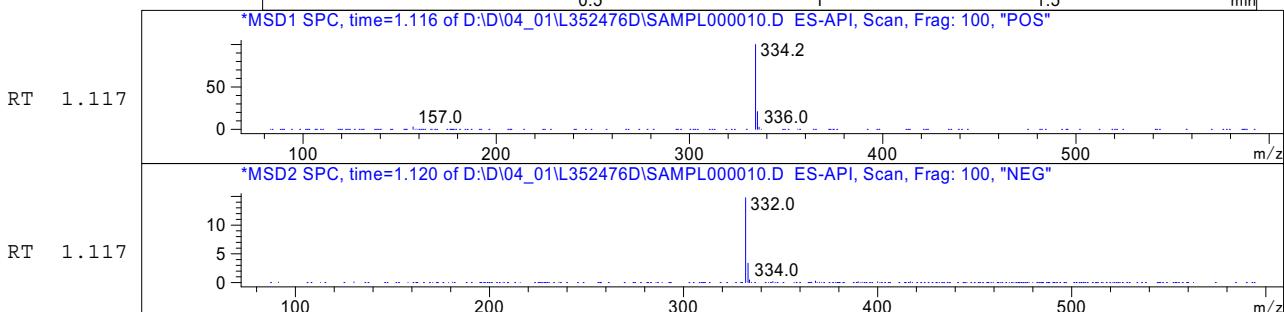
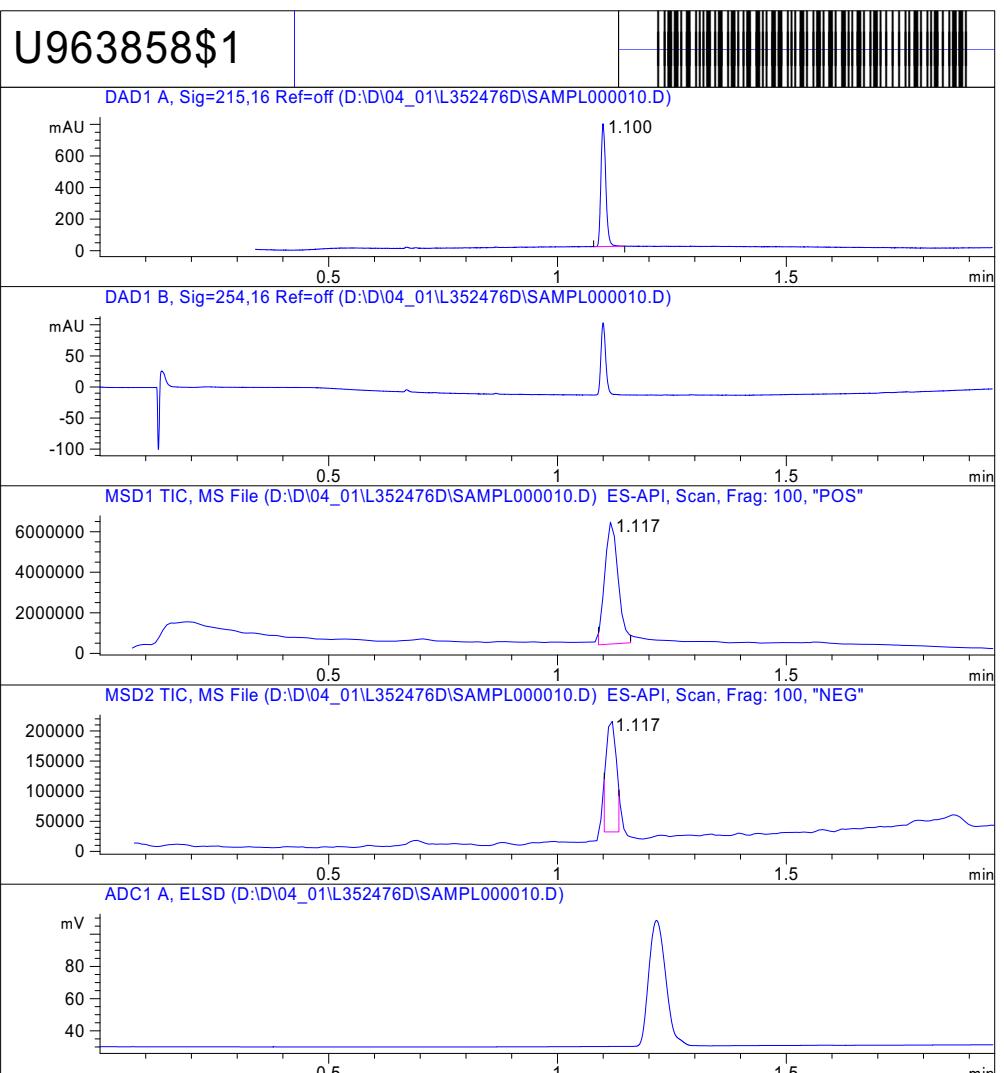
Z2017308172_

MaxPeak: 100.00%
Ret_Time: 1.100 min



Mol Wt 333.38
Exact Mass 333.17
Time Area%

1 1.100 100.00



Inj.Date 4/1/2021

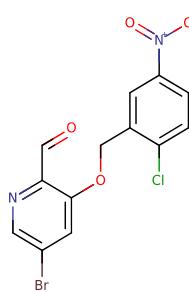
N

- 3 -

Acq. Method C:\CHEM32\ -> ->

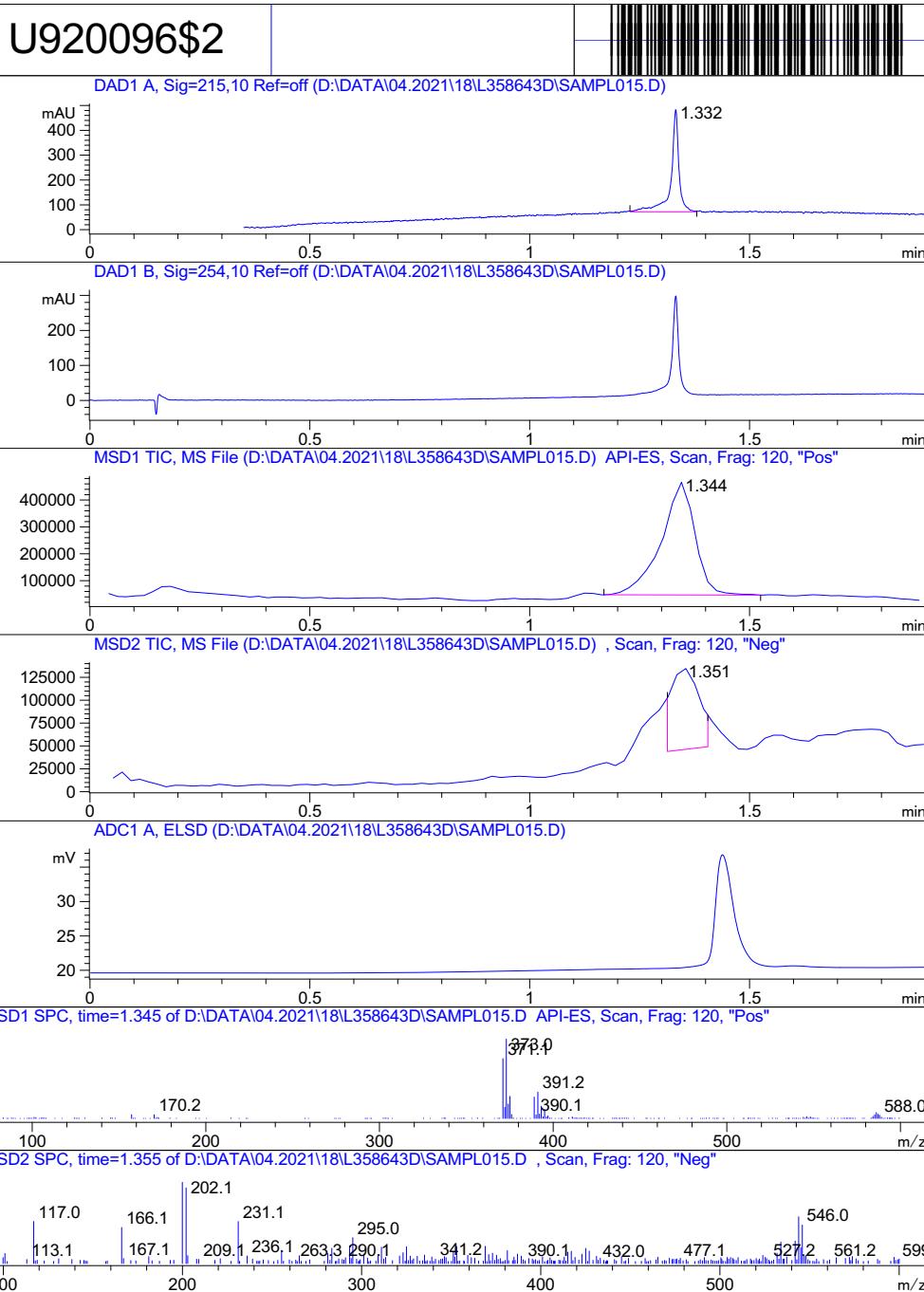
Z4929616344_

MaxPeak: 100.00%
Ret_Time: 1.332 min



Mol Wt 371.57
Exact Mass 371.93
Time Area%

1 1.332 100.00

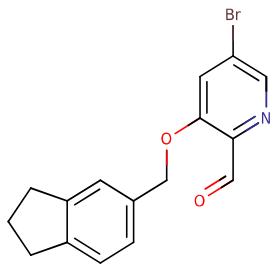


Inj.Date 4/18/2021

CH P2-B-06 -SL- Acq. Method C:\HPCHEM\ -> ->

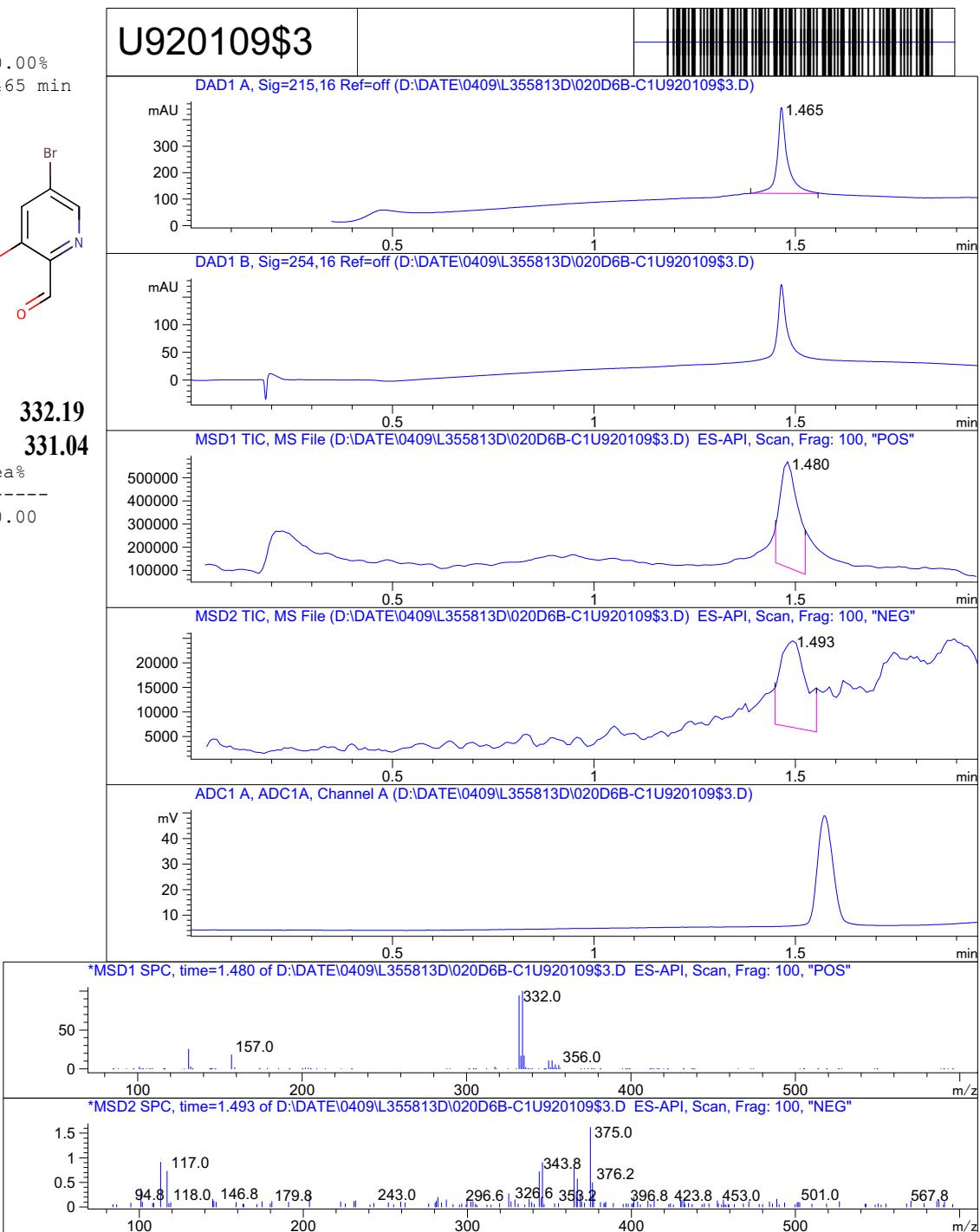
Z4954569105_

MaxPeak: 100.00%
Ret_Time: 1.465 min



Mol Wt 332.19
Exact Mass 331.04
Time Area%

1 1.465 100.00



Inj.Date 4/9/2021

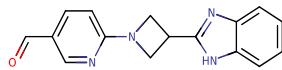
O

-11-

Acq. Method C:\Chem32\-> ->

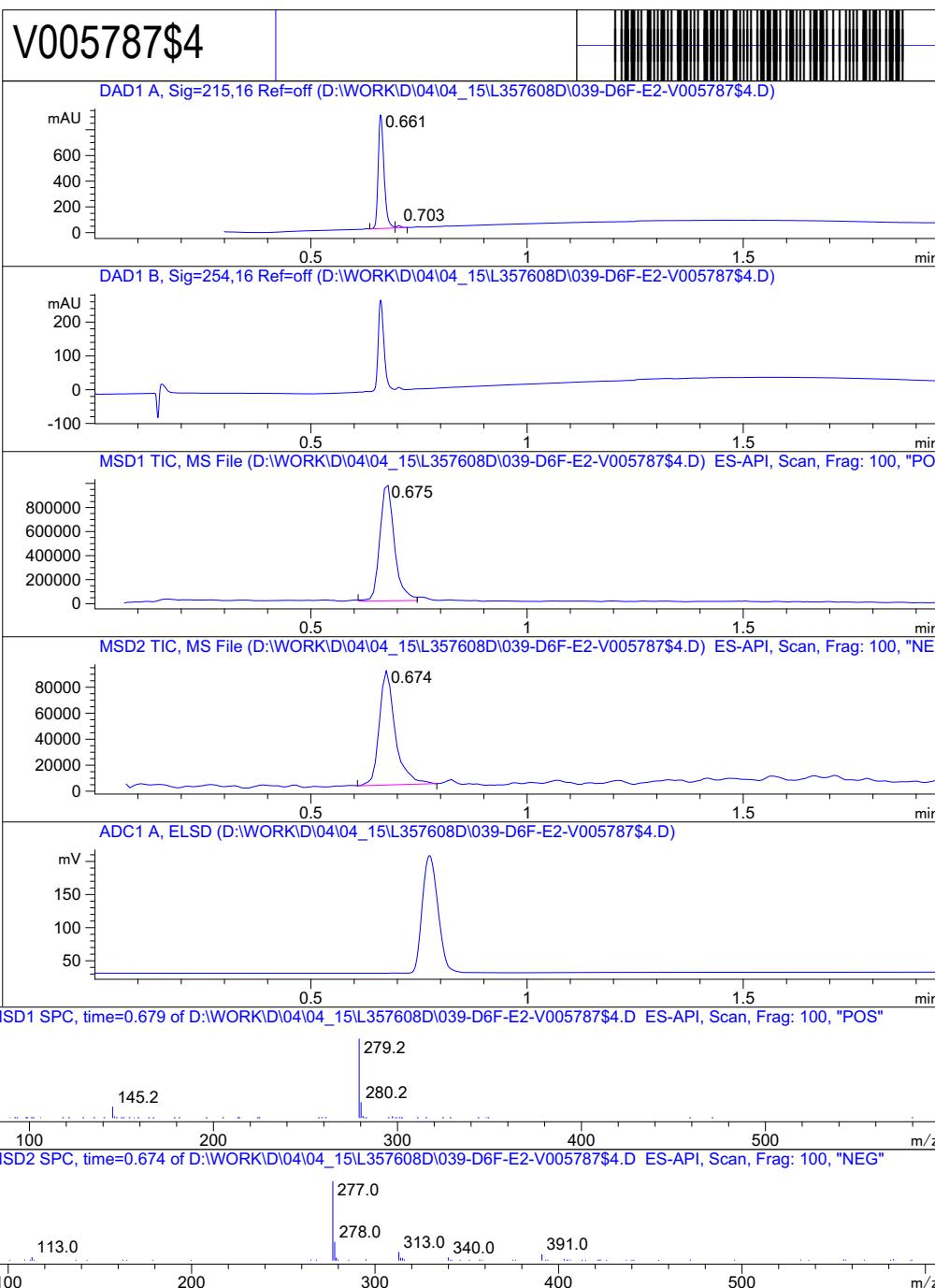
Z4954569202_

MaxPeak: 98.52%
Ret_Time: 0.661 min



Mol Wt 278.31
Exact Mass 278.13
Time Area%

1 0.661 98.52
2 0.703 1.48



Inj.Date 4/14/2021

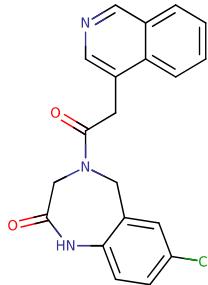
K

-7-

Acq. Method C:\Chem32\ -> ->

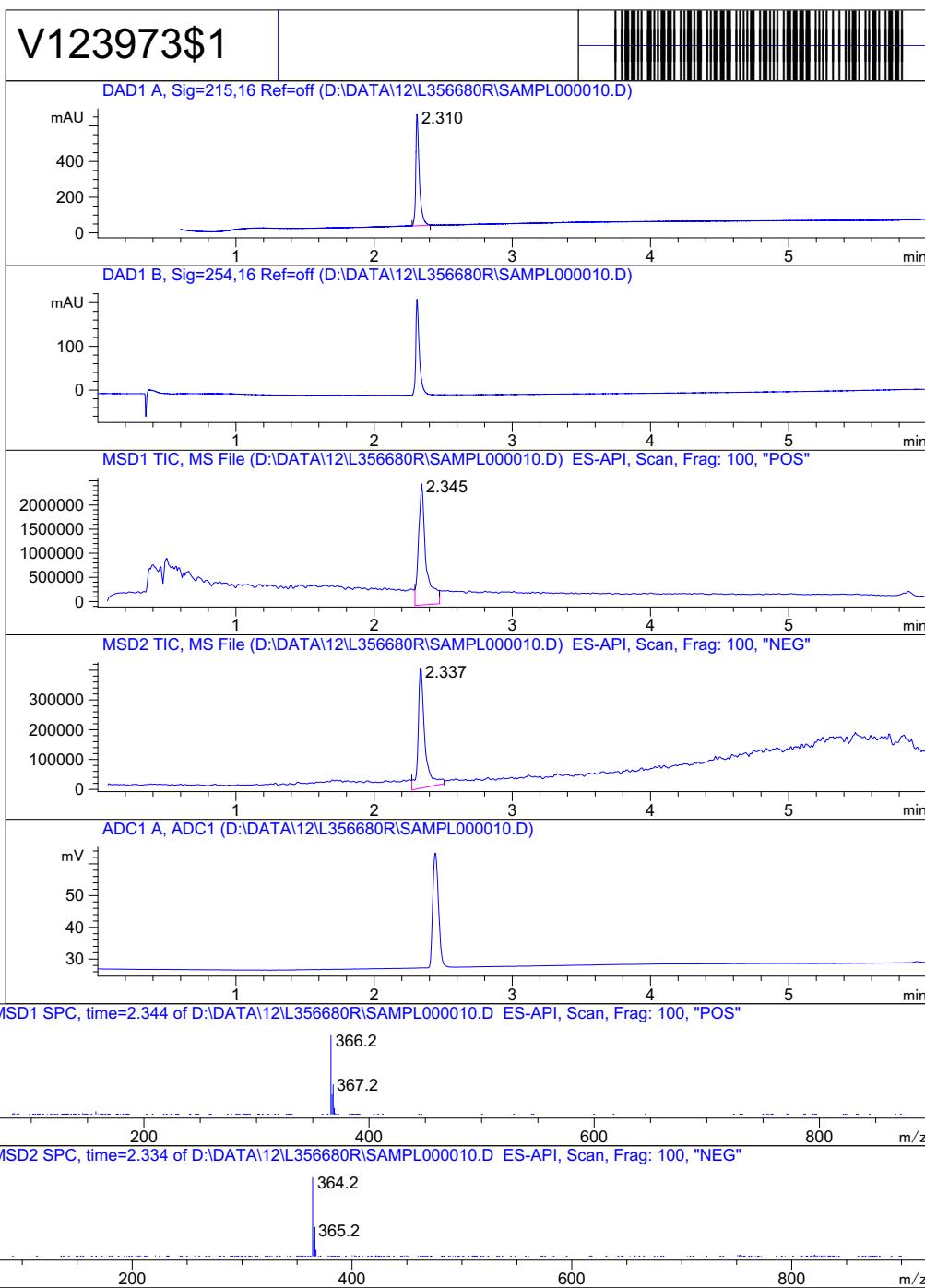
Z4968112353_

MaxPeak: 100.00%
Ret_Time: 2.310 min

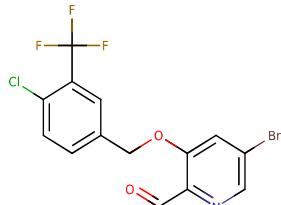


Mol Wt 365.81
Exact Mass 365.11
Time Area%

1 2.310 100.00

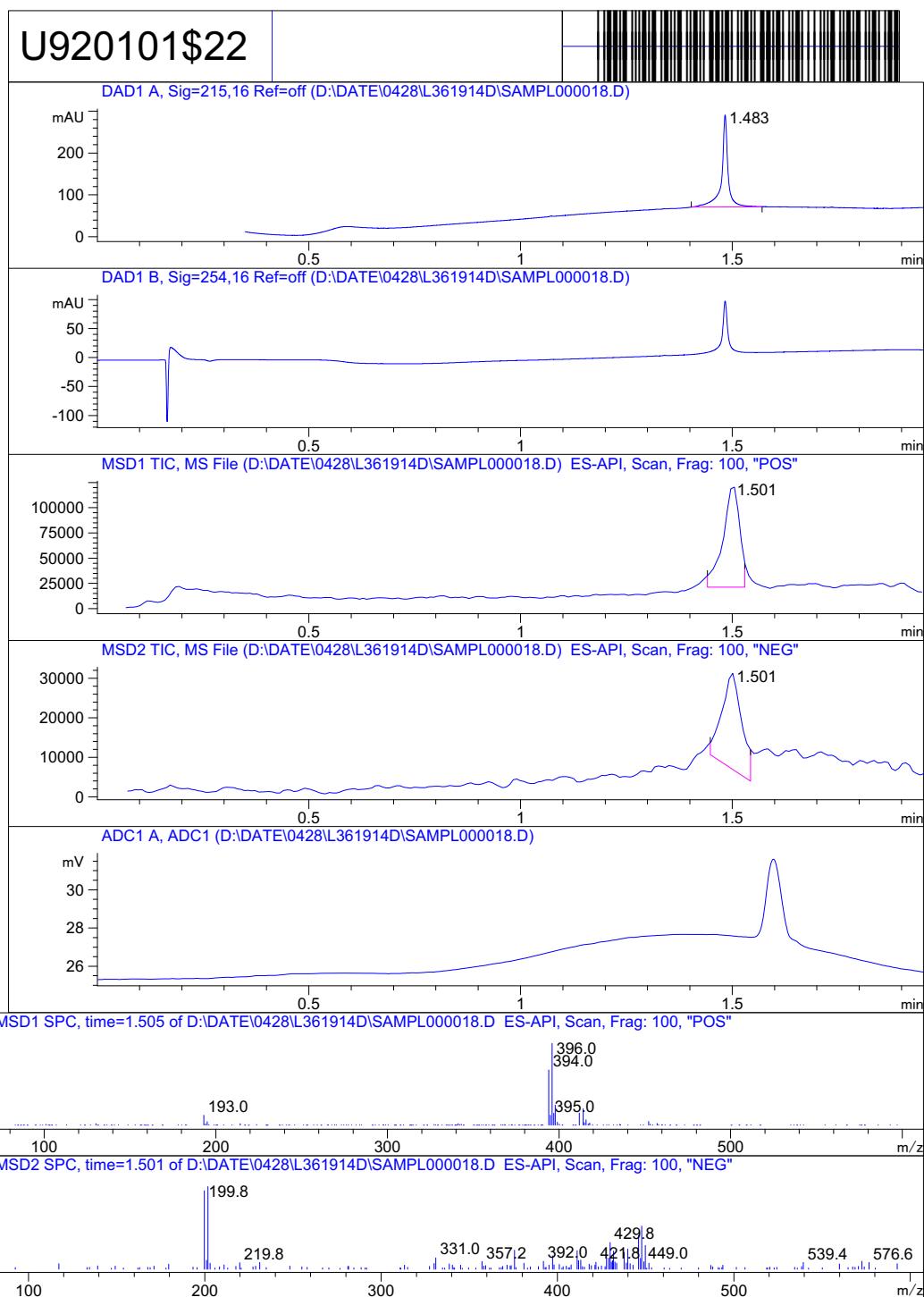


MaxPeak: 100.00%
Ret_Time: 1.483 min



Mol Wt 394.57
Exact Mass 394.95

#	Time	Area%
1	1.483	100.00



Inj.Date 4/28/2021

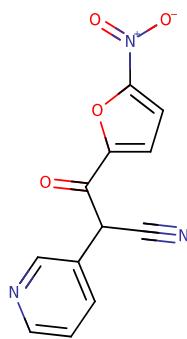
O

- 4 -

Acq. Method C:\CHEM32\-> ->

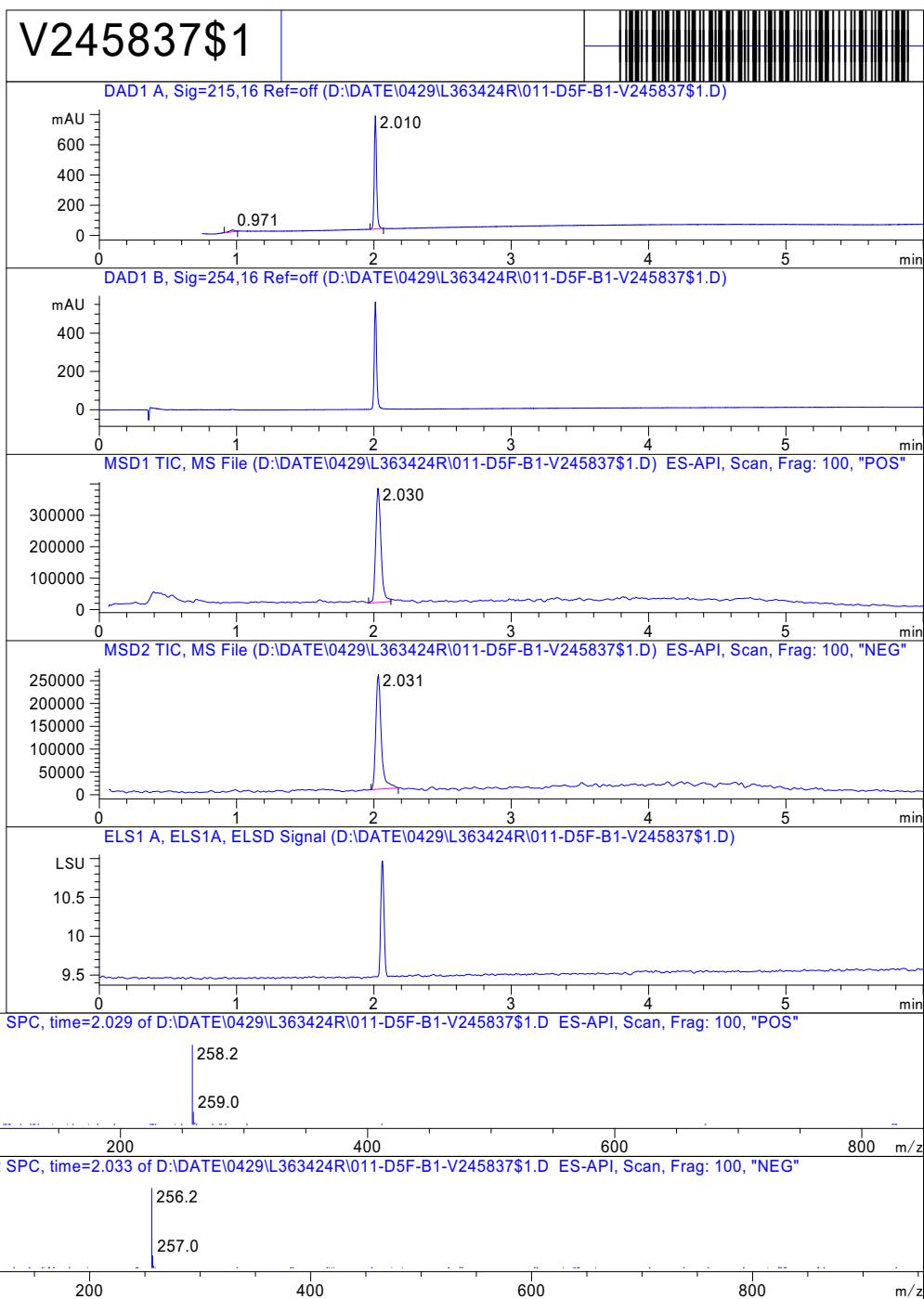
Z4954569122_

MaxPeak: 96.26%
Ret_Time: 2.010 min

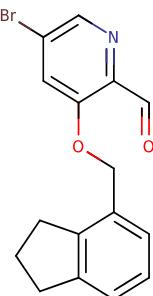


Mol Wt 257.2
Exact Mass 257.03
Time Area%

1 0.971 3.74
2 2.010 96.26

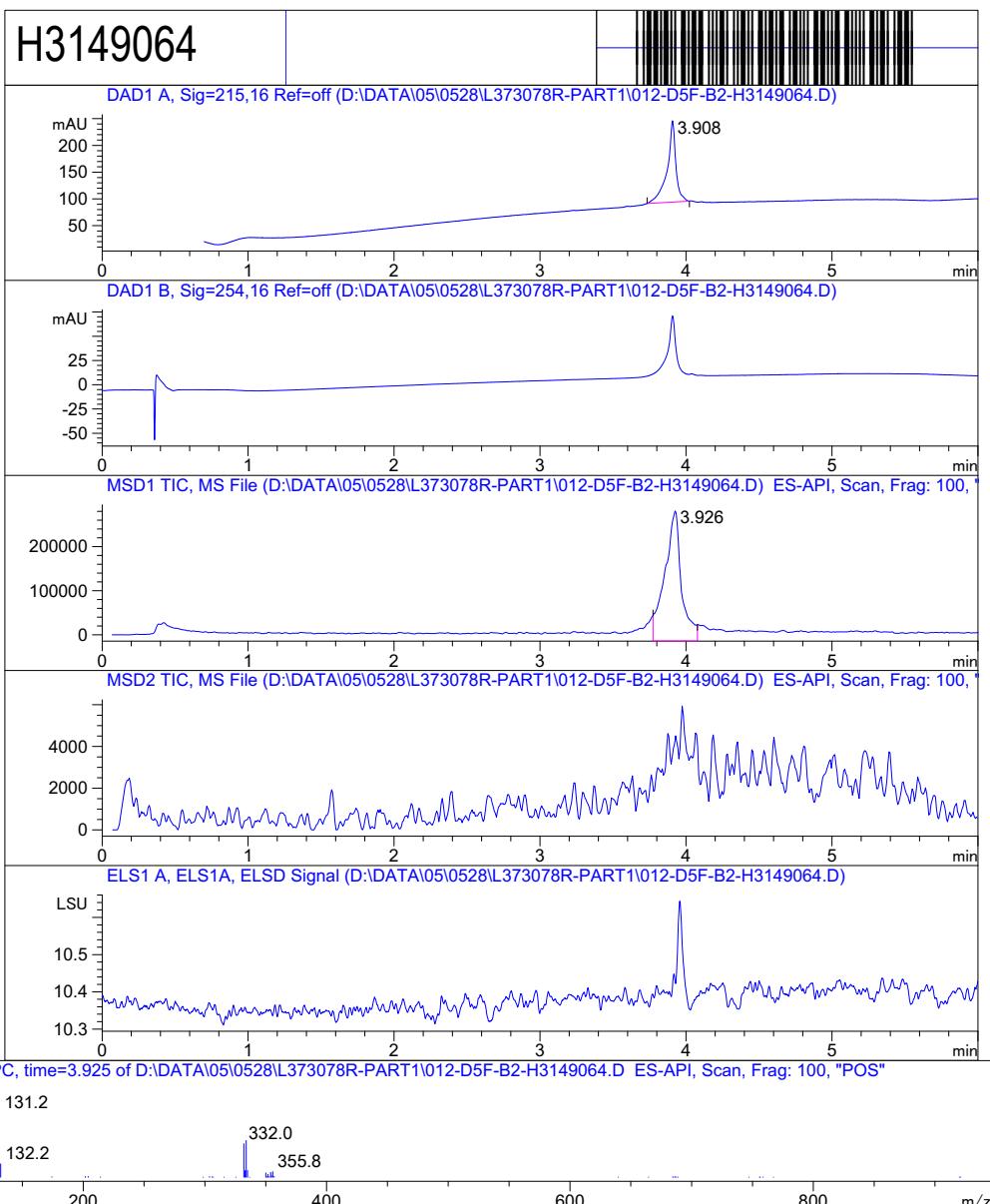


MaxPeak: 100.00%
Ret_Time: 3.908 min

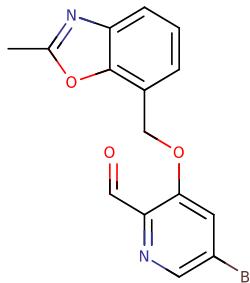


Mol Wt 332.19
Exact Mass 331.04
Time Area%

1 3.908 100.00

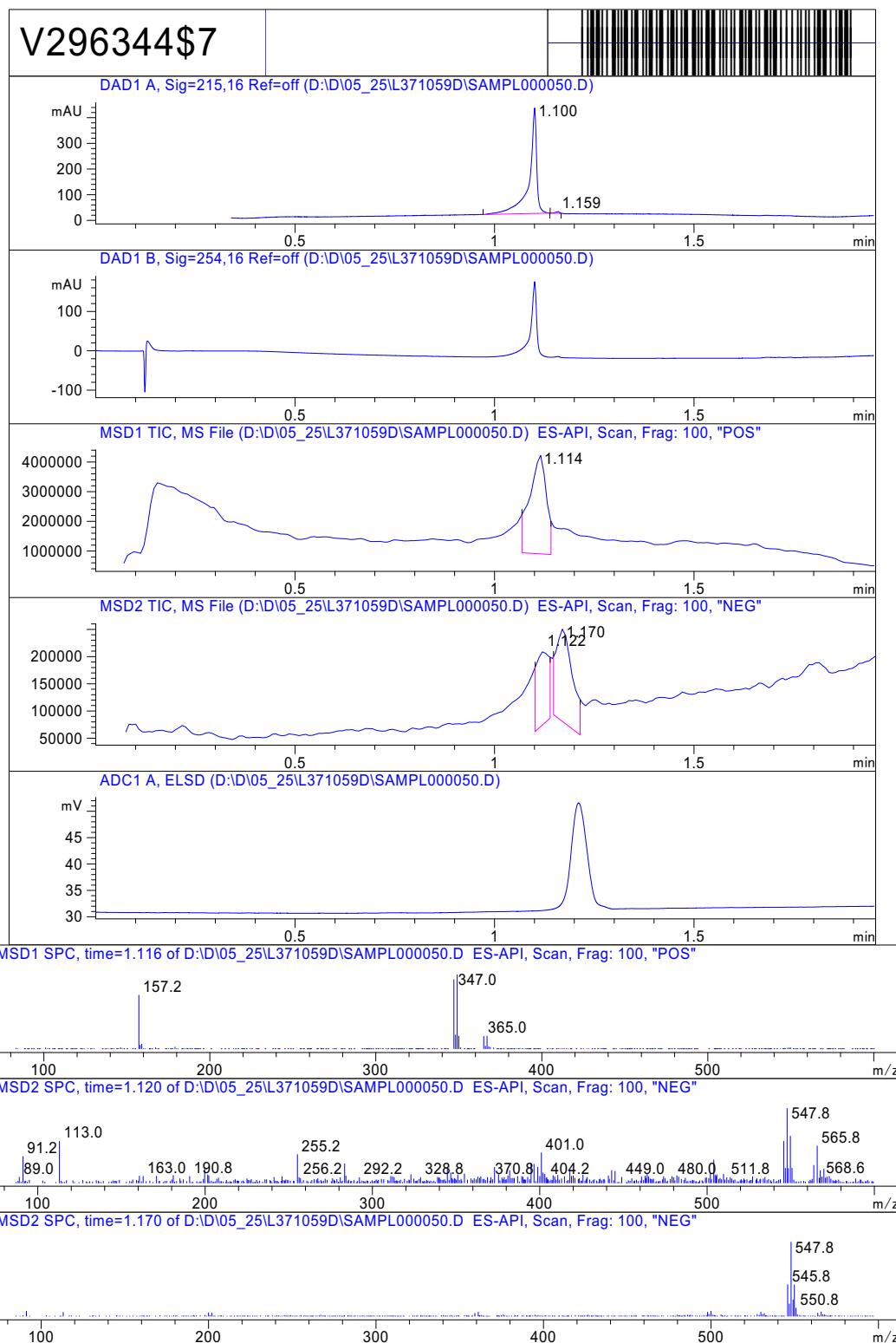


MaxPeak: 99.08%
Ret_Time: 1.100 min

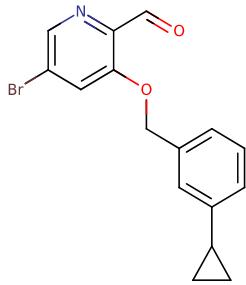


Mol Wt 347.16
Exact Mass 346

#	Time	Area%
1	1.100	99.08
2	1.159	0.92

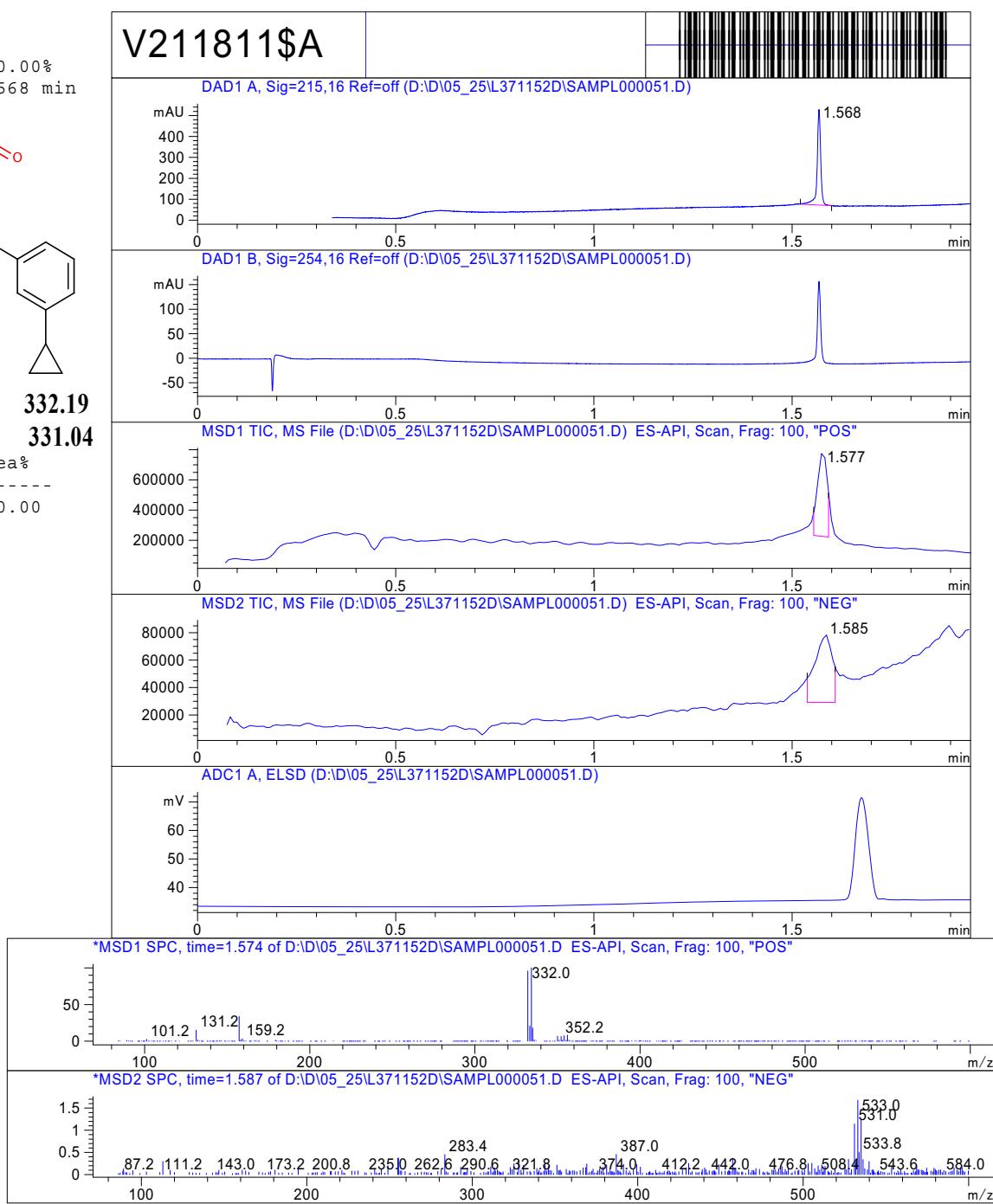


MaxPeak: 100.00%
Ret_Time: 1.568 min



Mol Wt 332.19
Exact Mass 331.04
Time Area%

1 1.568 100.00



Inj.Date 5/23/2021

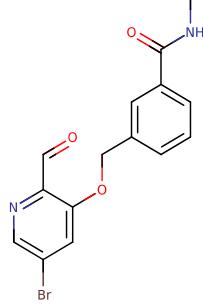
N

- 5 -

Acq. Method C:\CHEM32\ -> ->

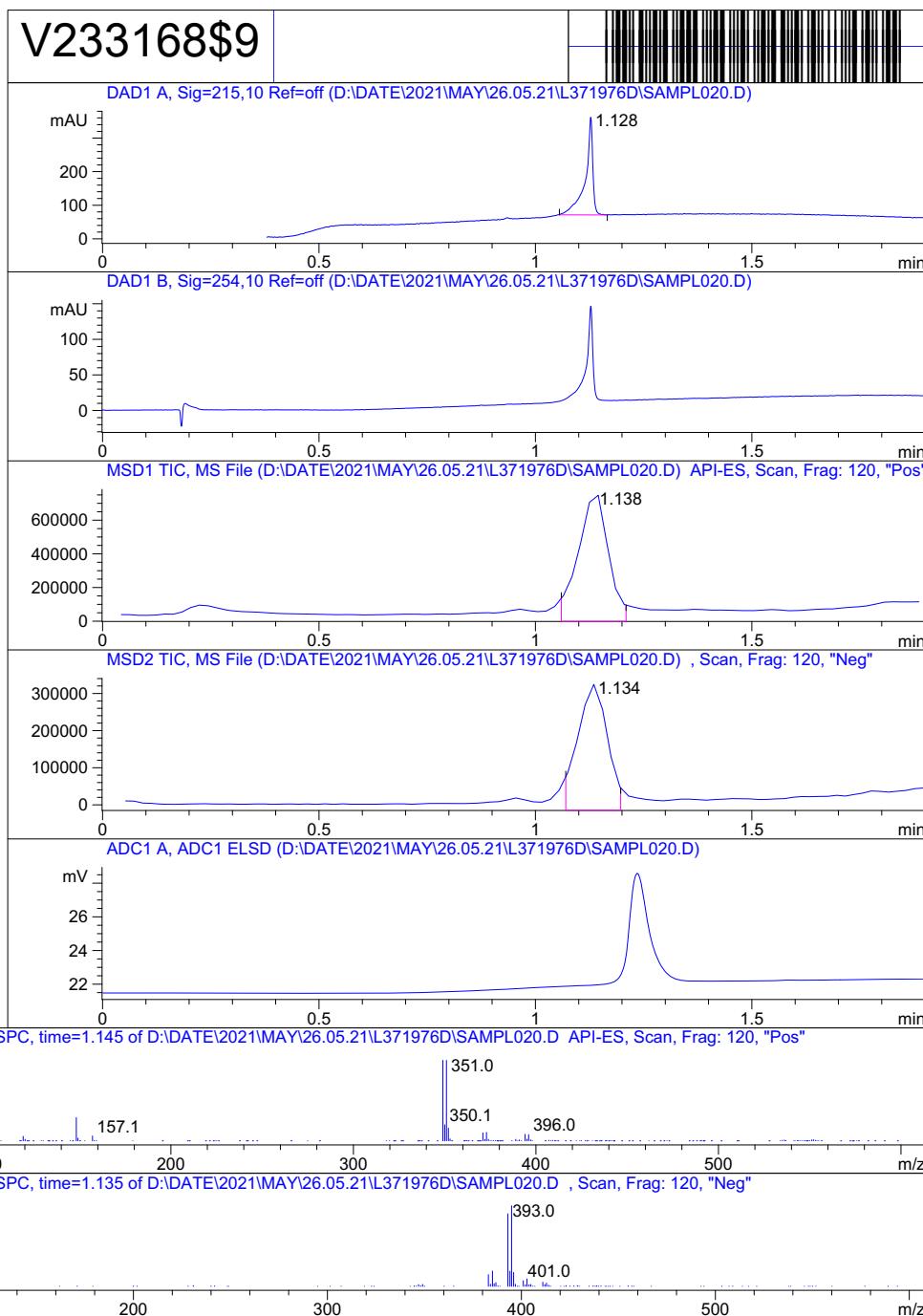
Z4989203264_

MaxPeak: 100.00%
Ret_Time: 1.128 min



Mol Wt 349.18
Exact Mass 348.02
Time Area%

1 1.128 100.00

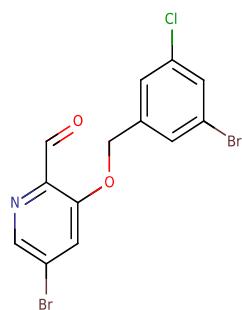


Inj.Date 5/26/2021

T P2-C-03 -SL- Acq. Method C:\HPCHEM\ -> ->

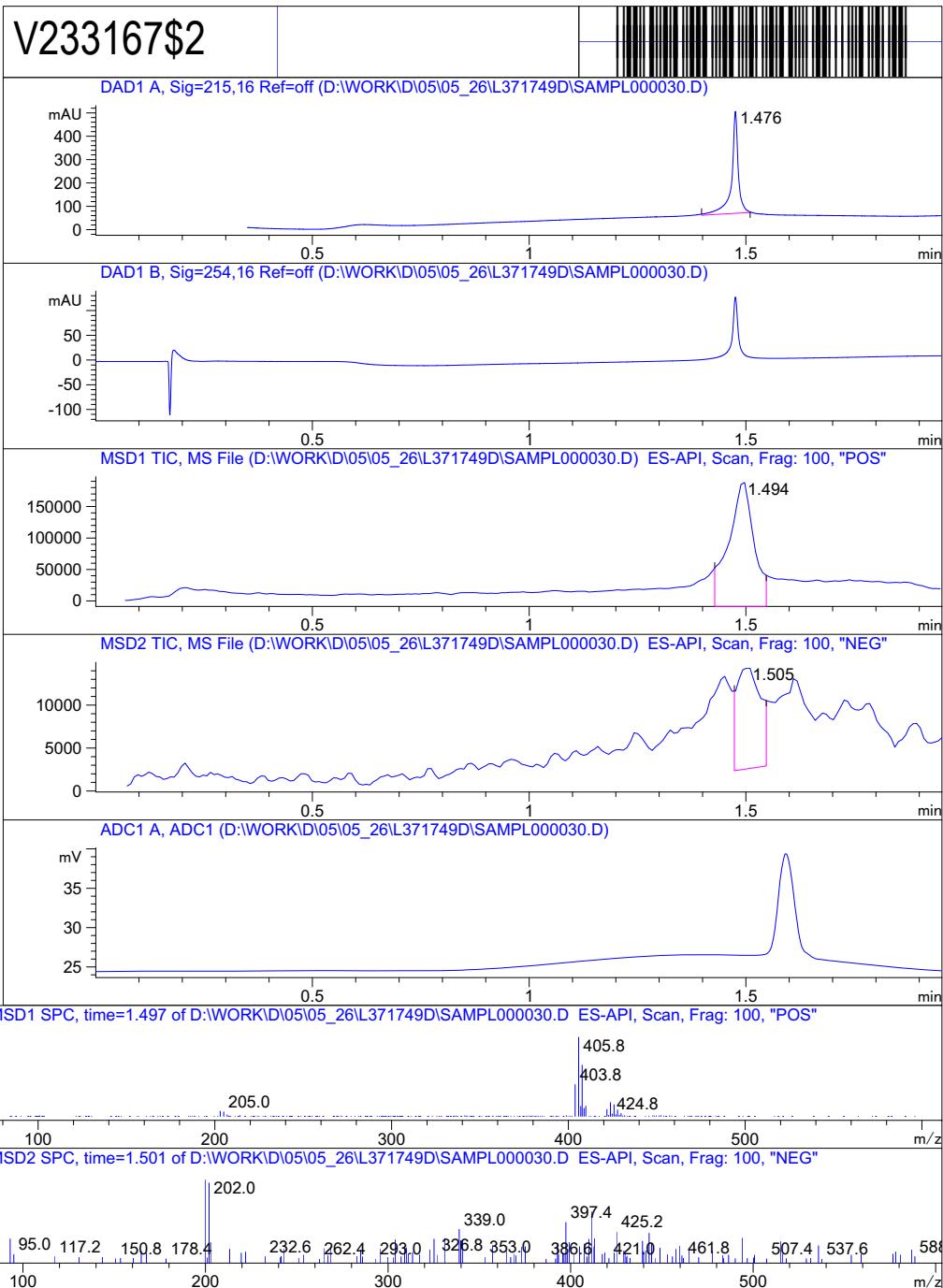
Z5009000157_

MaxPeak: 100.00%
Ret_Time: 1.476 min



Mol Wt 405.47
Exact Mass 404.87
Time Area%

1 1.476 100.00



Inj.Date 5/26/2021

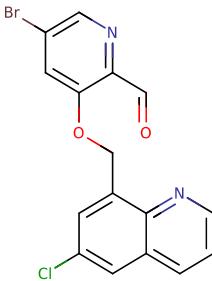
K

- 4 -

Acq. Method C:\CHEM32\-> ->

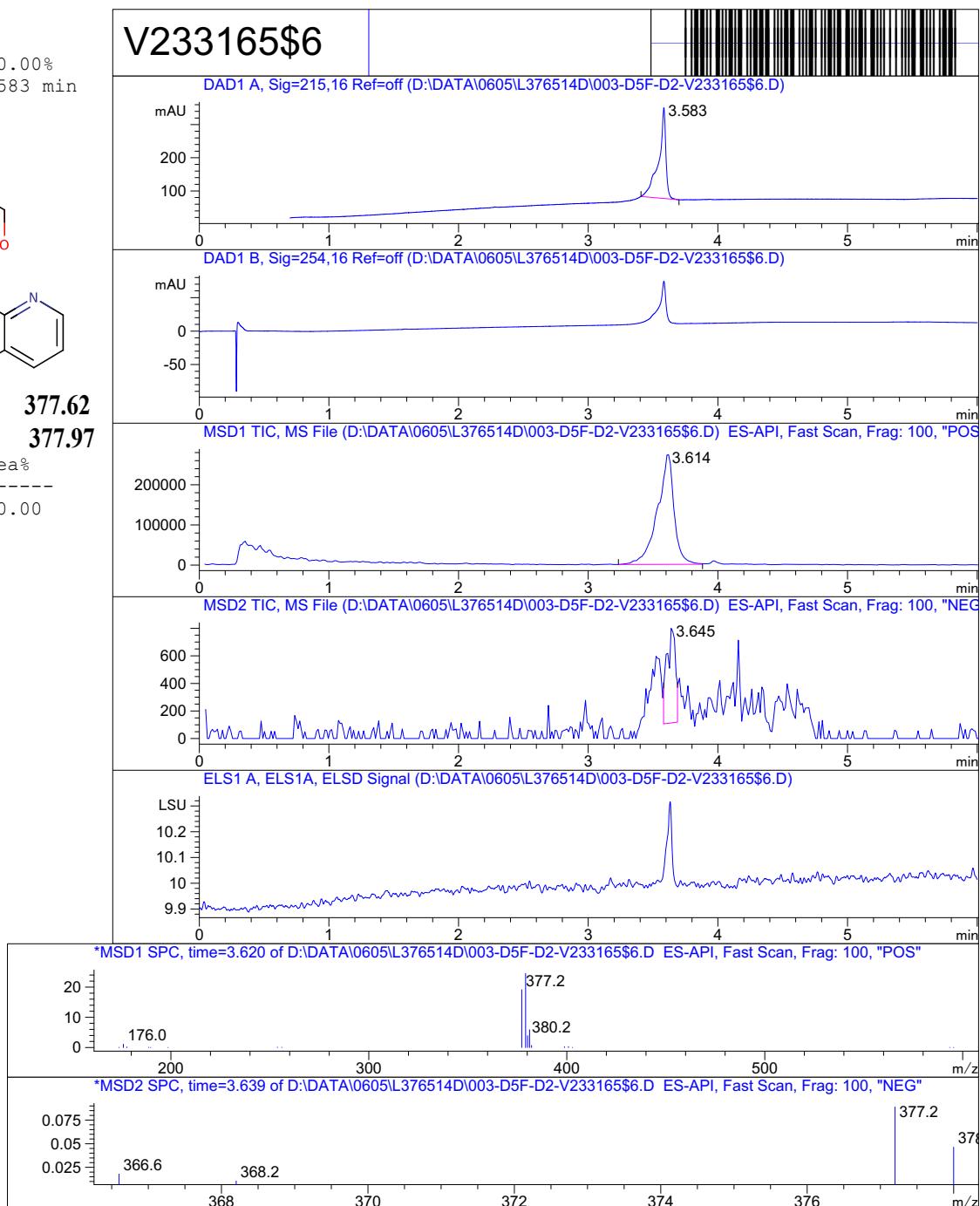
Z5009000156_

MaxPeak: 100.00%
Ret_Time: 3.583 min



Mol Wt 377.62
Exact Mass 377.97
Time Area%

1 3.583 100.00



Inj.Date 6/5/2021

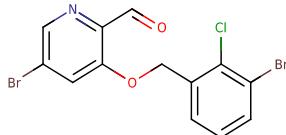
OA

24

Acq. Method C:\Users\ -> ->

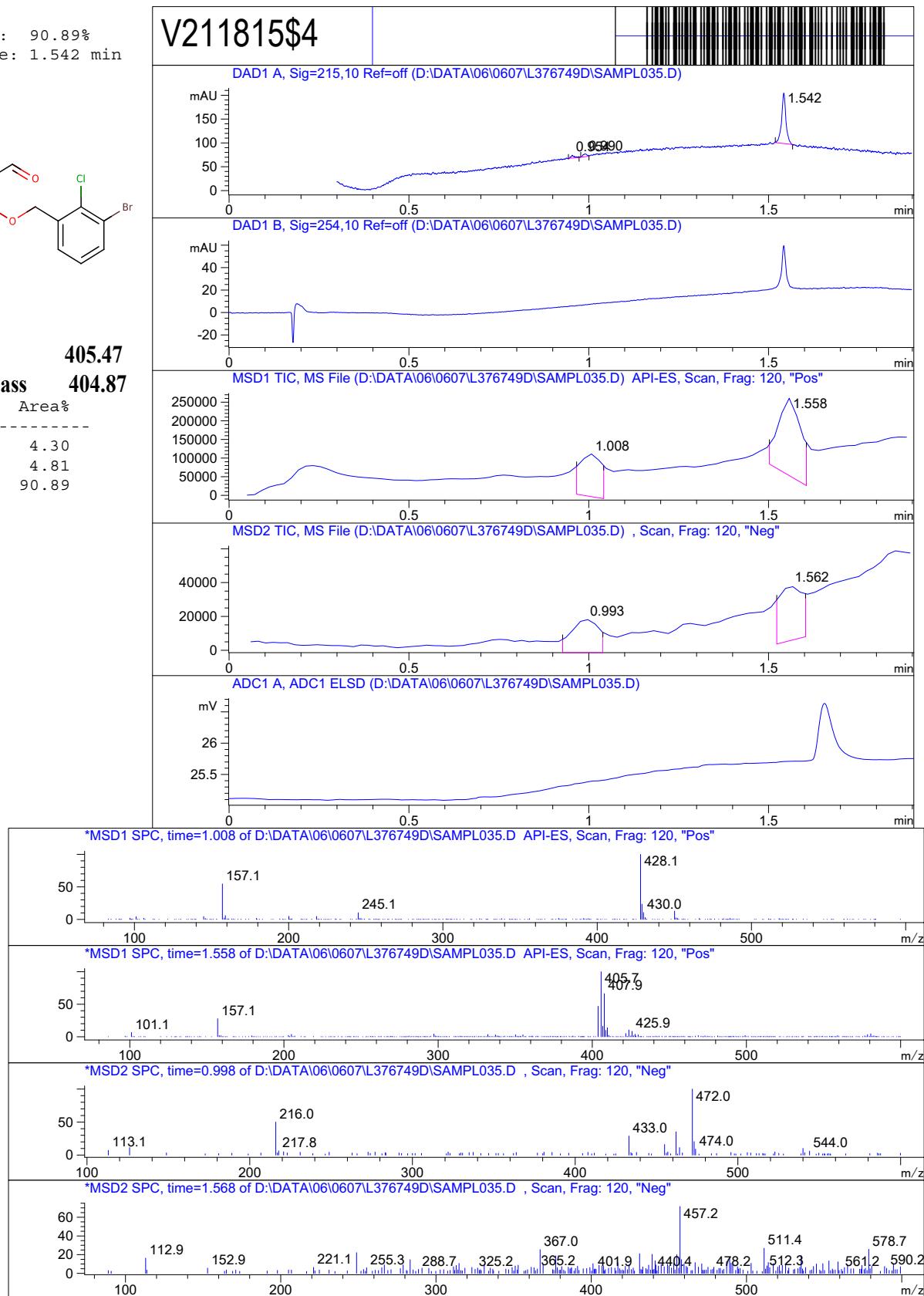
Z5009000154_

MaxPeak: 90.89%
Ret_Time: 1.542 min



Mol Wt 405.47
Exact Mass 404.87
Time Area%

1 0.954 4.30
2 0.990 4.81
3 1.542 90.89



Inj.Date 6/6/2021

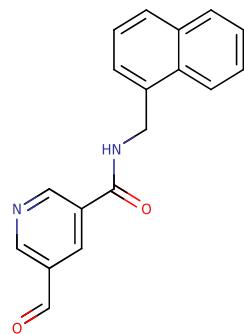
LT

-VL-

Acq. Method C:\HPCHEM\ -> ->

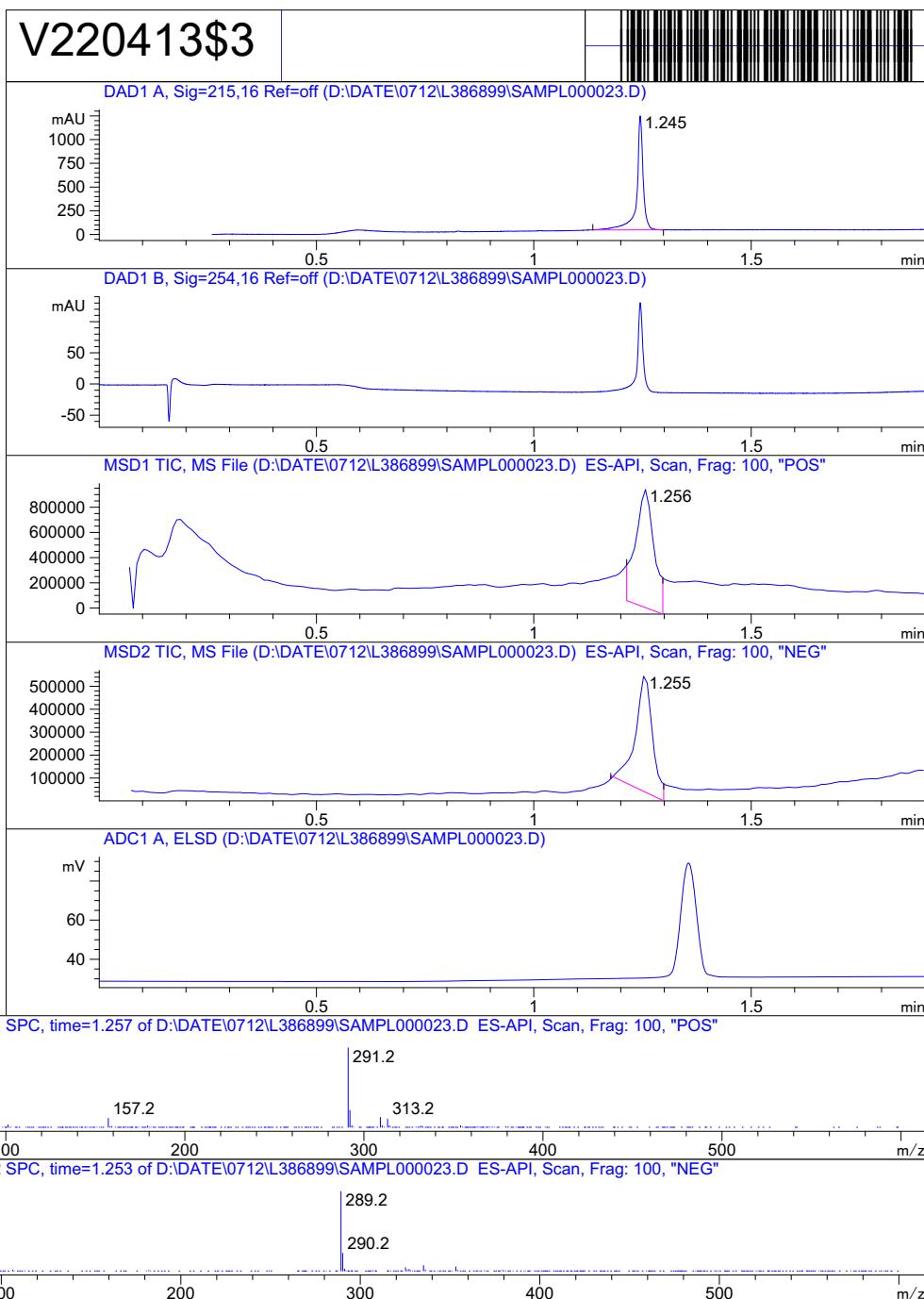
Z4989203260_

MaxPeak: 100.00%
Ret_Time: 1.245 min



Mol Wt 290.32
Exact Mass 290.12
Time Area%

1 1.245 100.00



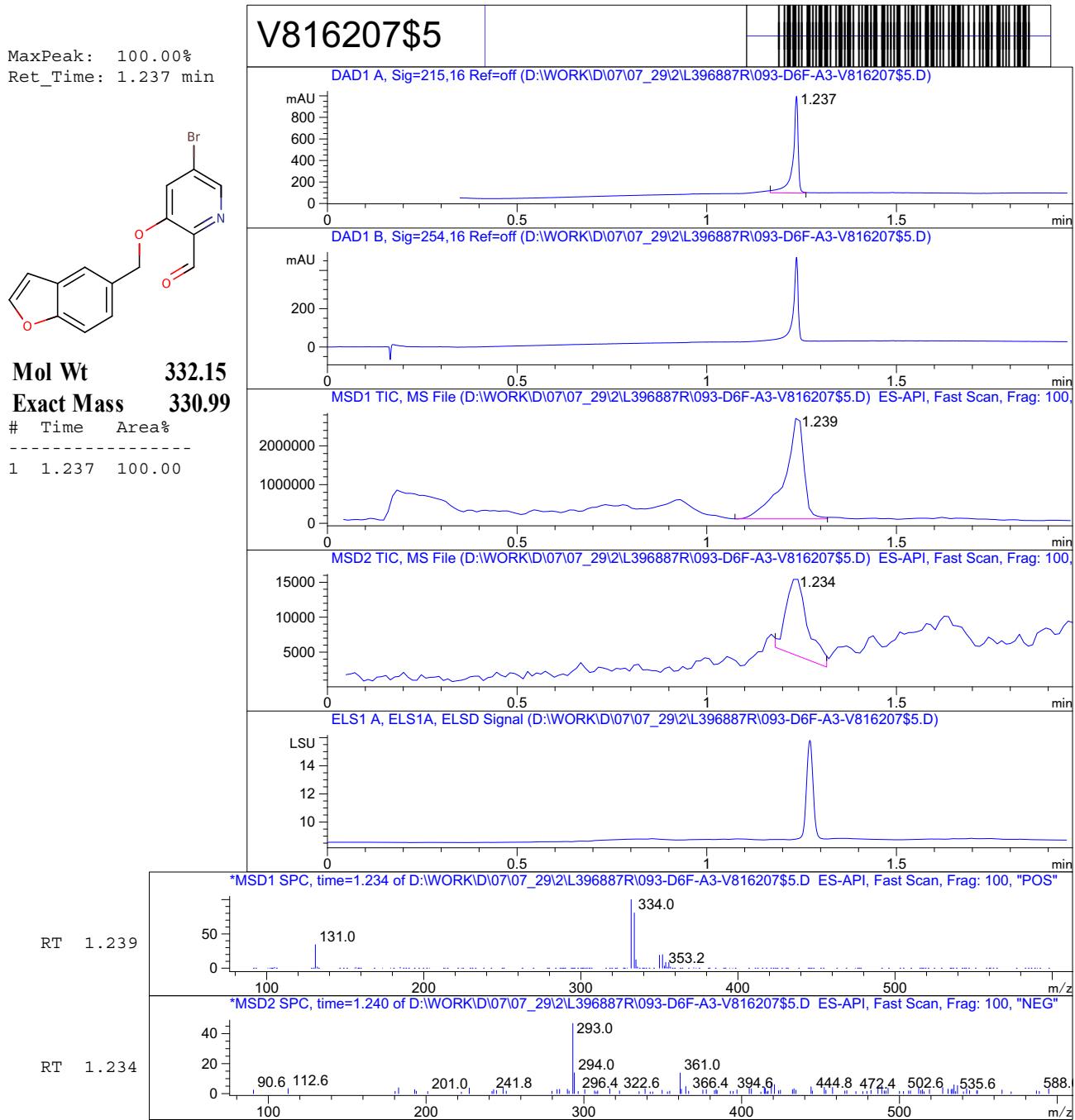
Inj.Date 7/4/2021

E

-5-

Acq. Method C:\CHEM32\-> ->

Z4968112276_



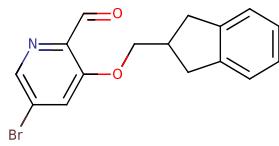
Inj.Date 7/29/2021

K <invalid>

Acq. Method C:\Users\ -> ->

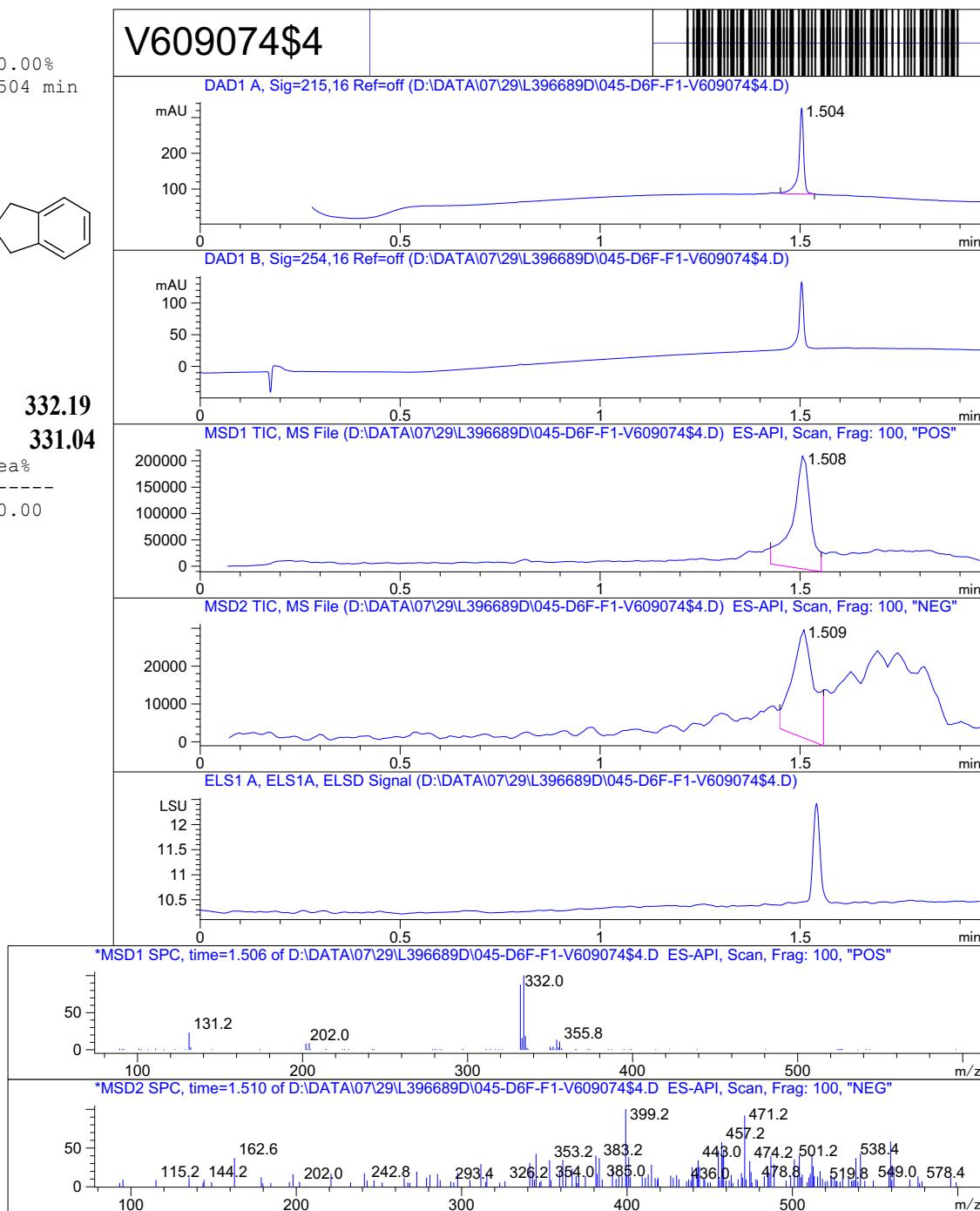
Z5084954212_

MaxPeak: 100.00%
Ret_Time: 1.504 min



Mol Wt 332.19
Exact Mass 331.04
Time Area%

1 1.504 100.00



Inj.Date 7/29/2021

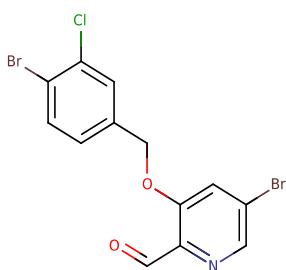
LB

-16-

Acq. Method C:\Chem32\-> ->

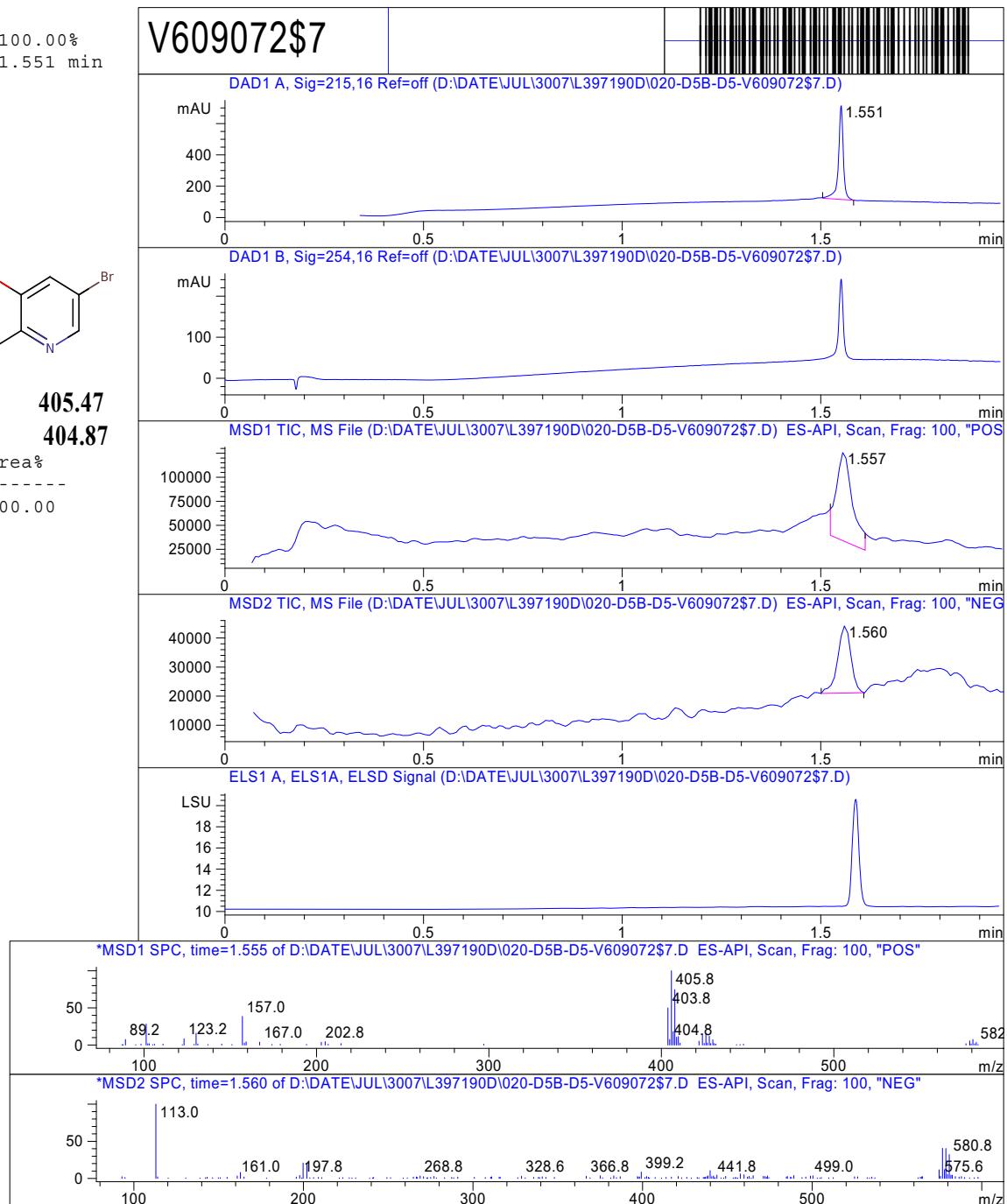
Z5084954221_

MaxPeak: 100.00%
Ret_Time: 1.551 min



Mol Wt 405.47
Exact Mass 404.87
Time Area%

1 1.551 100.00



Inj.Date 7/30/2021

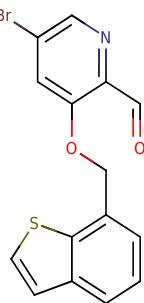
Y

-14-

Acq. Method C:\Chem32\ -> ->

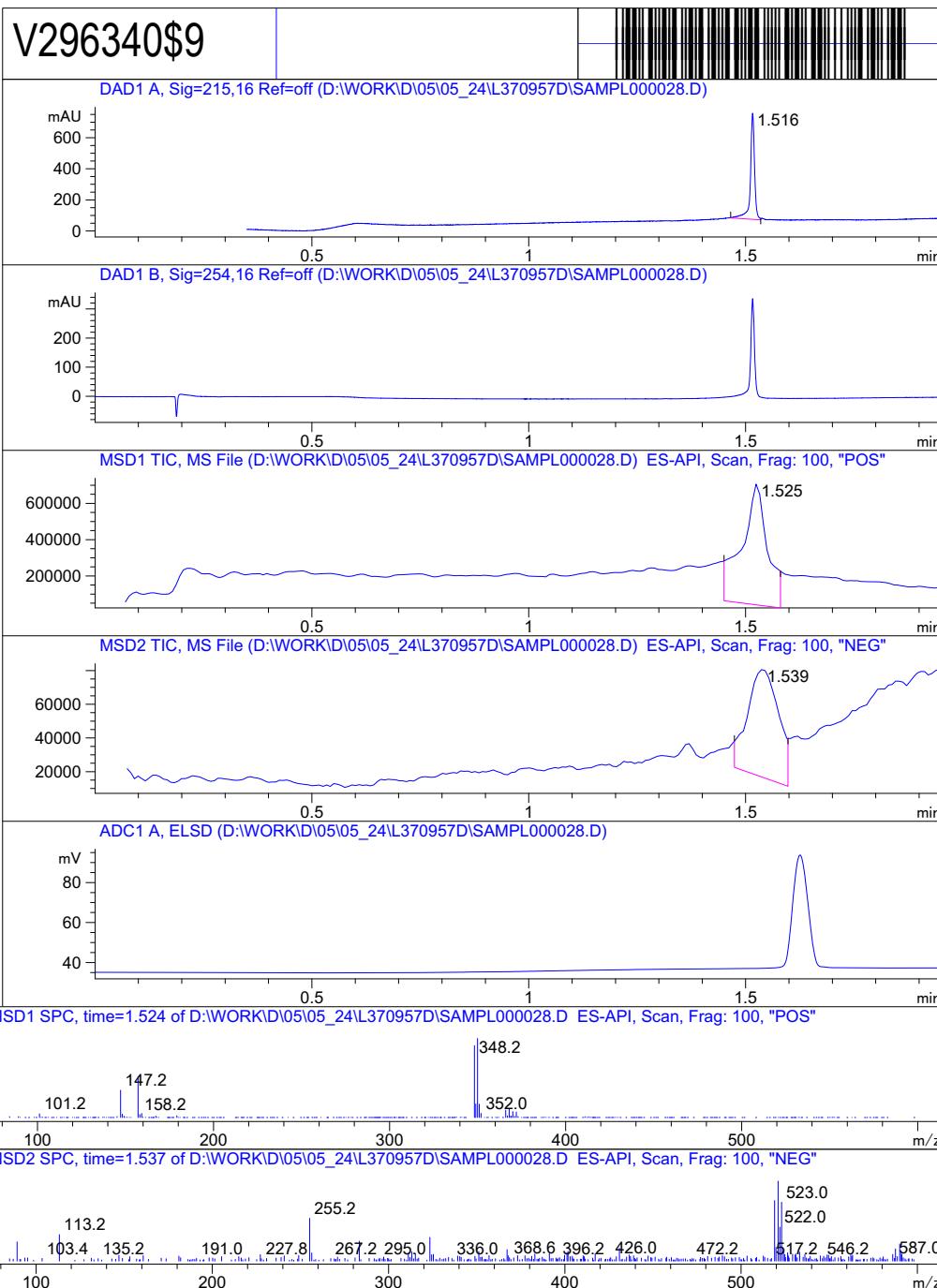
Z5084954217_

MaxPeak: 100.00%
Ret_Time: 1.516 min



Mol Wt 348.21
Exact Mass 348.97
Time Area%

1 1.516 100.00



Inj.Date 5/23/2021

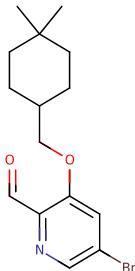
K

-5 -

Acq. Method C:\CHEM32\-> ->

Z4989203252_

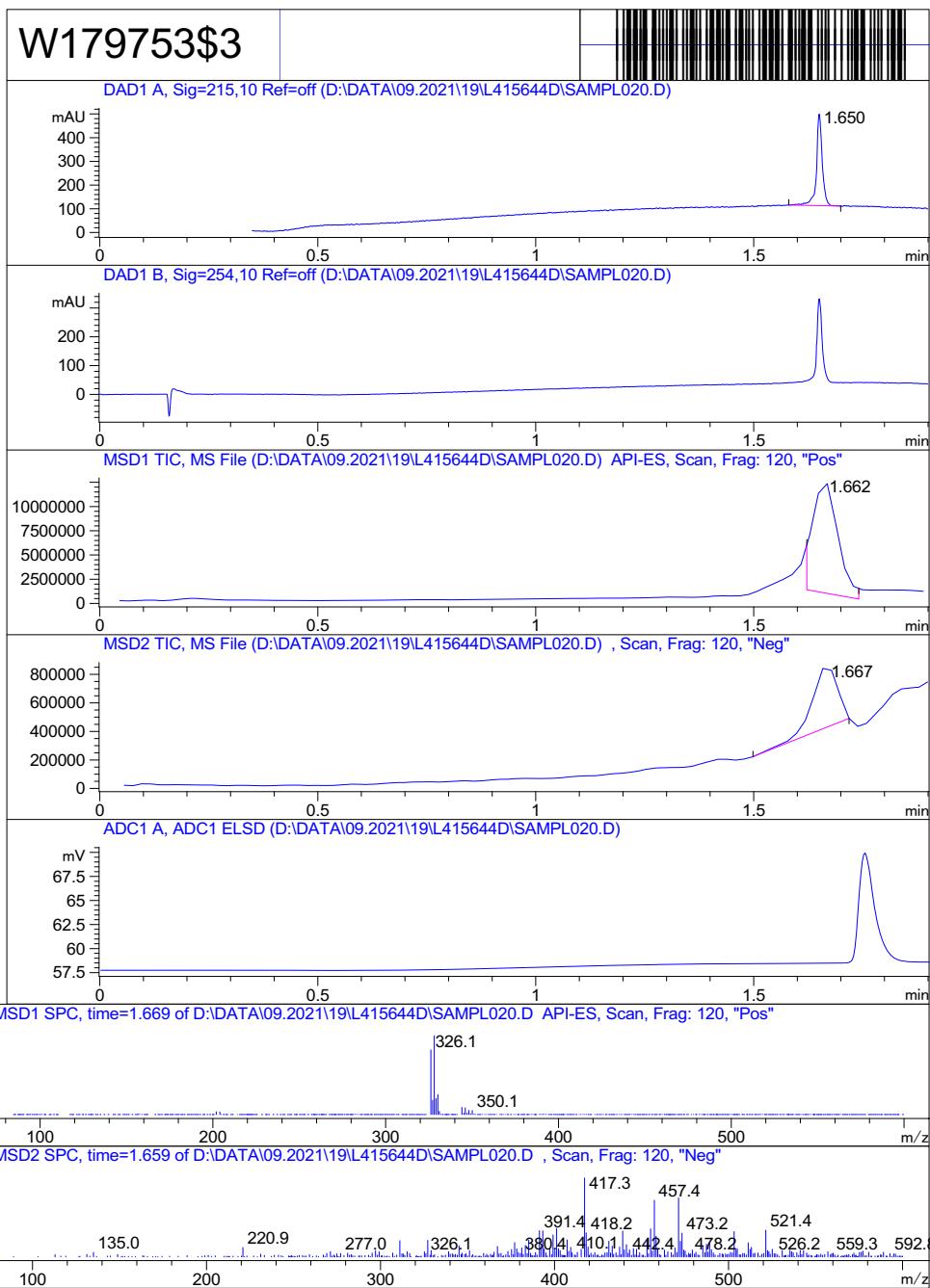
MaxPeak: 100.00%
Ret_Time: 1.650 min



Mol Wt 326.23
Exact Mass 325.1

Time Area%

1 1.650 100.00



Inj.Date 9/19/2021

CH

P2-C-03

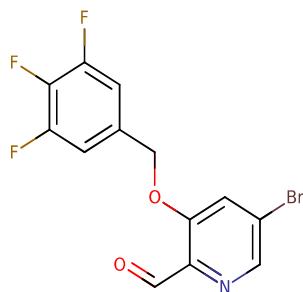
-SL-

Acq. Method C:\HPCHEM\ -> ->

Z5192779009_

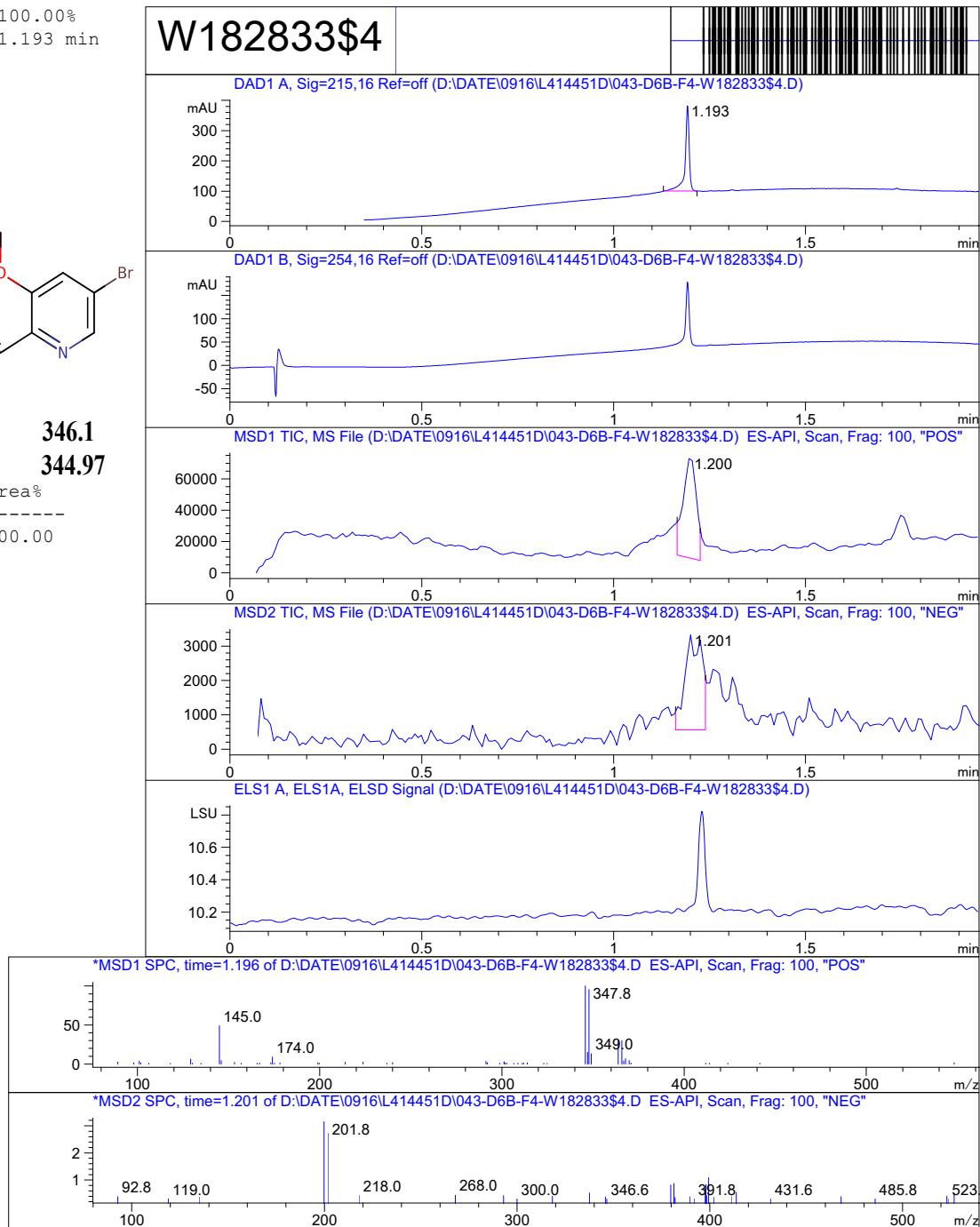
MaxPeak: 100.00%
Ret_Time: 1.193 min

W182833\$4



Mol Wt 346.1
Exact Mass 344.97
Time Area%

1 1.193 100.00



Inj.Date 9/16/2021

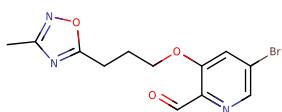
E

13

Acq. Method C:\Chem32\-> ->

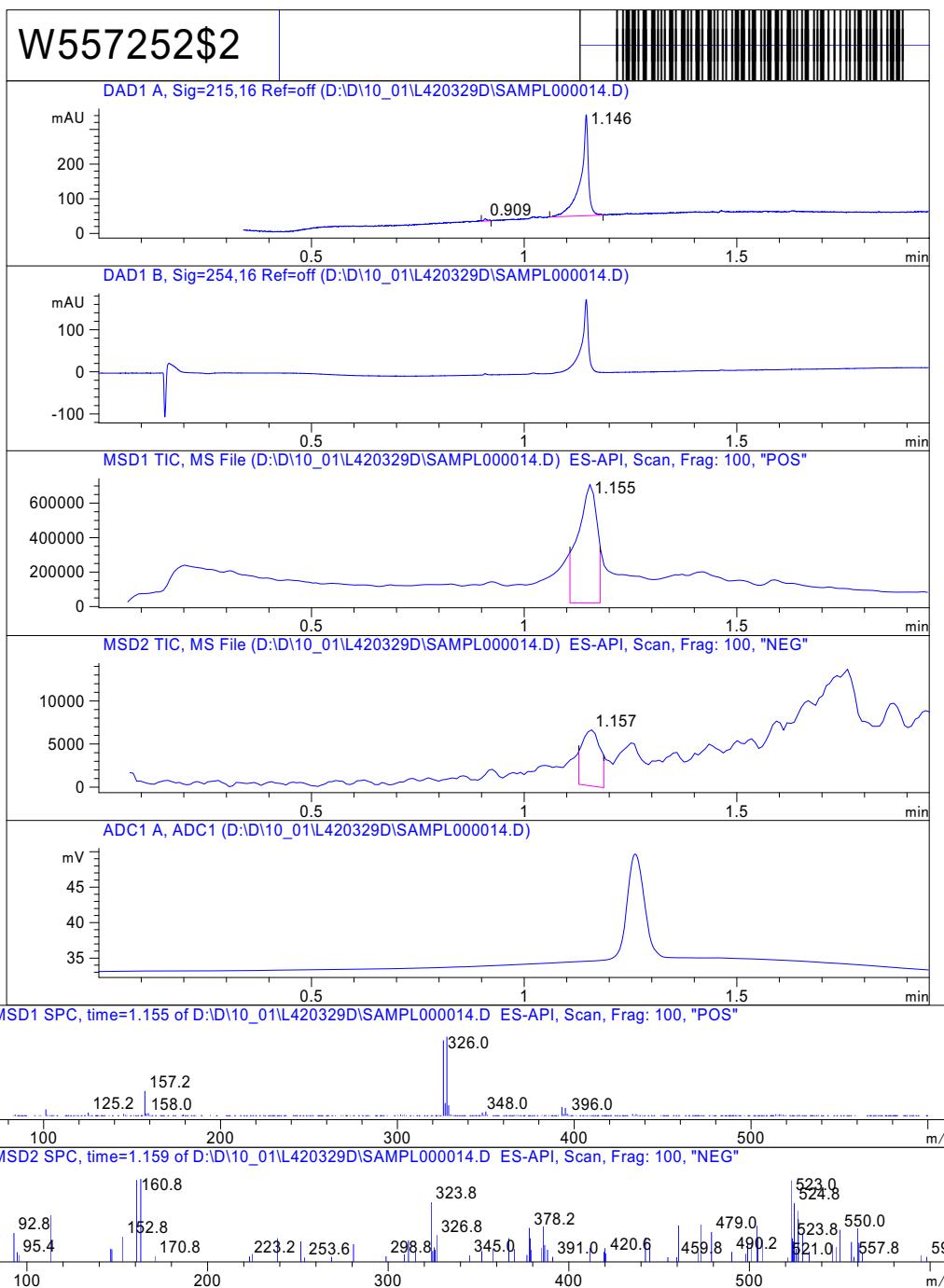
Z5192779037_

MaxPeak: 98.96%
Ret_Time: 1.146 min



Mol Wt 326.15
Exact Mass 325.01
Time Area%

1 0.909 1.04
2 1.146 98.96



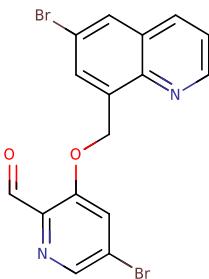
Inj.Date 10/1/2021

N

- 4 - Acq. Method C:\CHEM32\ -> ->

Z2991877909_

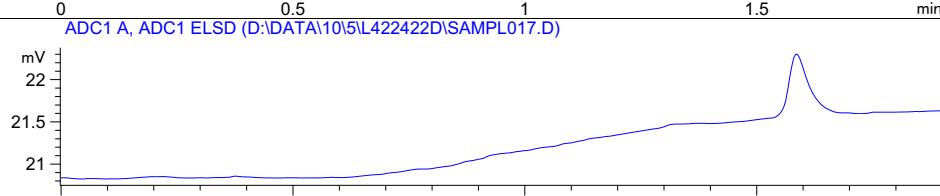
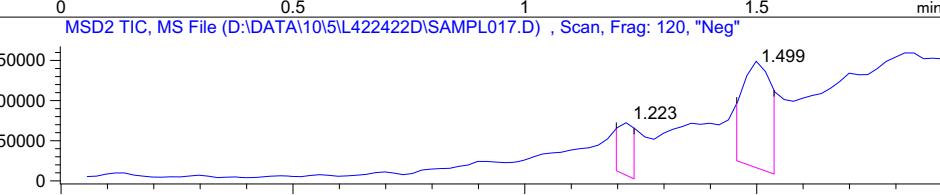
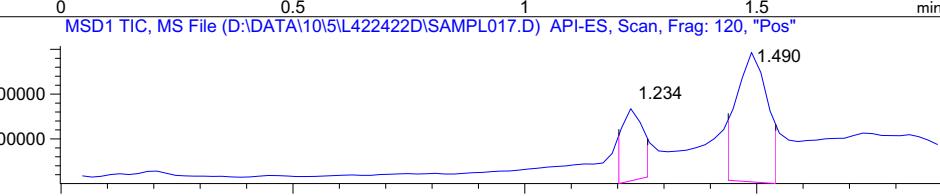
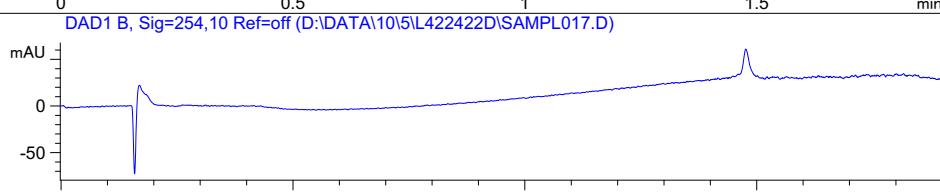
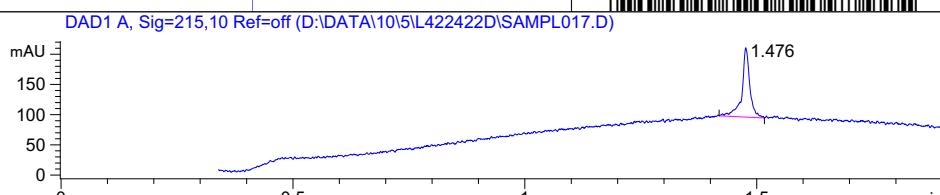
MaxPeak: 100.00%
Ret_Time: 1.476 min



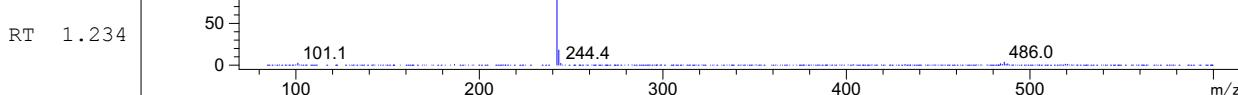
Mol Wt 422.07
Exact Mass 421.92
Time Area%

1 1.476 100.00

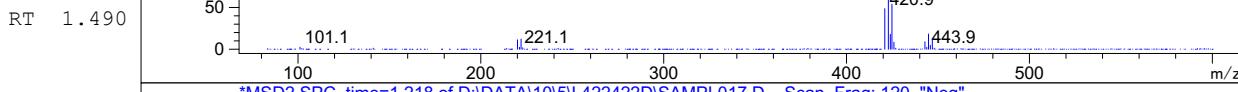
W557642\$B



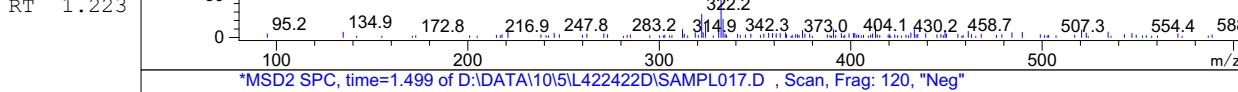
*MSD1 SPC, time=1.228 of D:\DATA\10\5\422422D\SAMPL017.D API-ES, Scan, Frag: 120, "Pos"



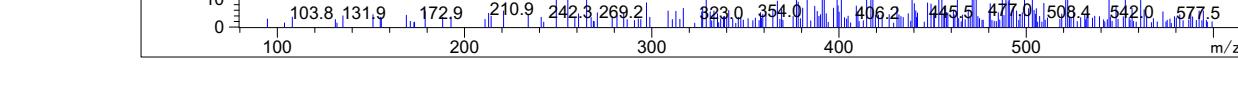
*MSD1 SPC, time=1.489 of D:\DATA\10\5\422422D\SAMPL017.D API-ES, Scan, Frag: 120, "Pos"



*MSD2 SPC, time=1.218 of D:\DATA\10\5\422422D\SAMPL017.D, Scan, Frag: 120, "Neg"



*MSD2 SPC, time=1.499 of D:\DATA\10\5\422422D\SAMPL017.D, Scan, Frag: 120, "Neg"



Inj.Date 10/6/2021

LB

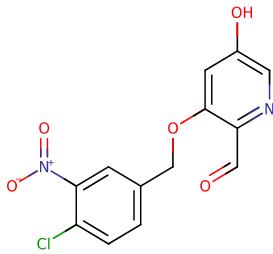
-SL-

Acq. Method C:\HPCHEM\ ->

->

Z5192779150_

MaxPeak: 100.00%
Ret_Time: 2.908 min

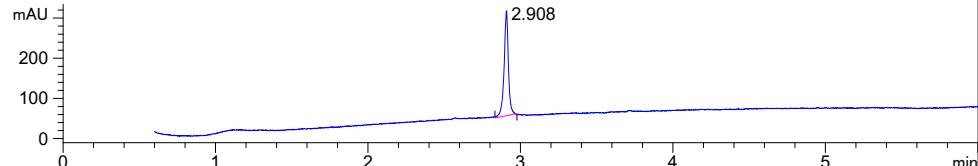


Mol Wt 308.67
Exact Mass 308.01
Time Area%

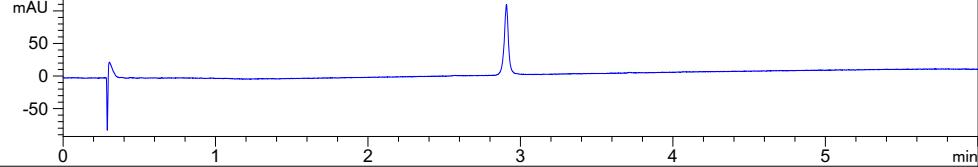
1 2.908 100.00

W656530\$2

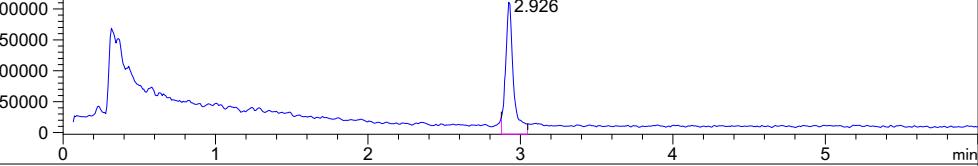
DAD1 A, Sig=215,16 Ref=off (D:\WORK\ID\10\10_05\1\422195E\069-2-W656530\$2.D)



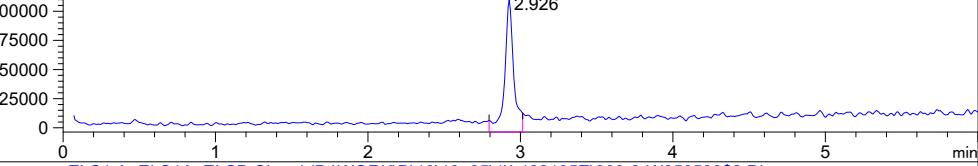
DAD1 B, Sig=254,16 Ref=off (D:\WORK\ID\10\10_05\1\422195E\069-2-W656530\$2.D)



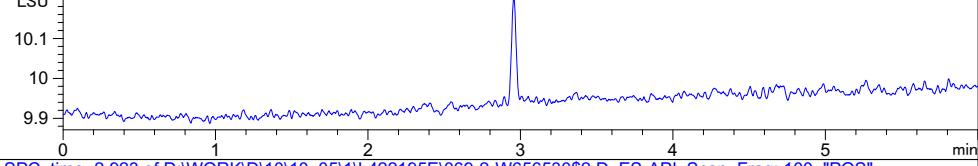
MSD1 TIC, MS File (D:\WORK\ID\10\10_05\1\422195E\069-2-W656530\$2.D) ES-API, Scan, Frag: 100, "POS"



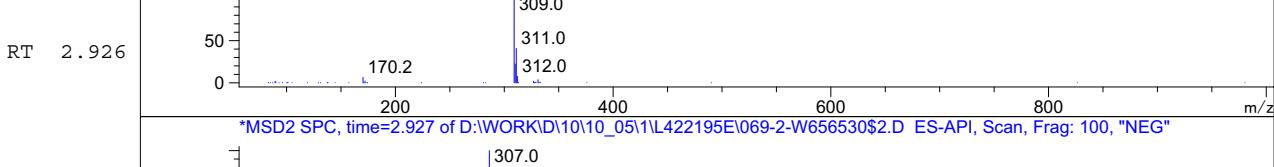
MSD2 TIC, MS File (D:\WORK\ID\10\10_05\1\422195E\069-2-W656530\$2.D) ES-API, Scan, Frag: 100, "NEG"



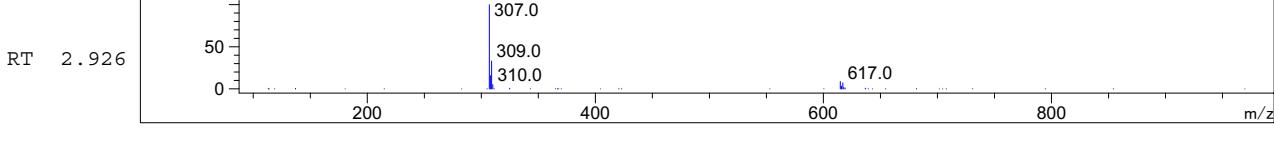
ELS1 A, ELS1A, ELSD Signal (D:\WORK\ID\10\10_05\1\422195E\069-2-W656530\$2.D)



*MSD1 SPC, time=2.923 of D:\WORK\ID\10\10_05\1\422195E\069-2-W656530\$2.D ES-API, Scan, Frag: 100, "POS"



*MSD2 SPC, time=2.927 of D:\WORK\ID\10\10_05\1\422195E\069-2-W656530\$2.D ES-API, Scan, Frag: 100, "NEG"



Inj.Date 10/5/2021

K

Vial 2

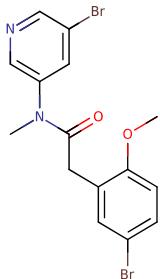
-18-

Acq. Method C:\Chem32\ ->

->

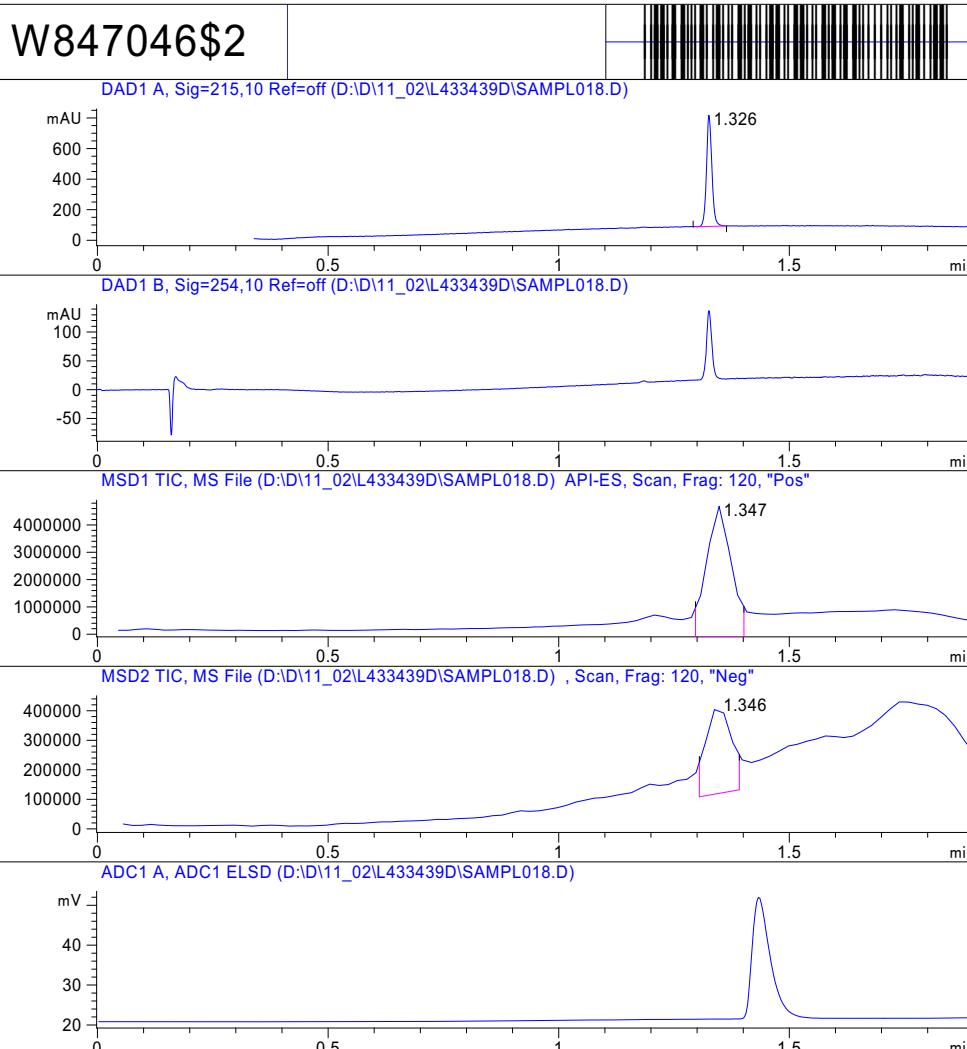
Z4954569176_

MaxPeak: 100.00%
Ret_Time: 1.326 min



Mol Wt 414.09
Exact Mass 413.96
Time Area%

1 1.326 100.00

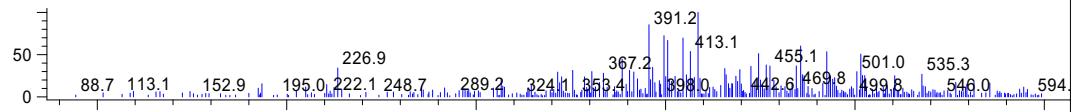


*MSD1 SPC, time=1.348 of D:\D\11_02\I433439D\SAMPL018.D API-ES, Scan, Frag: 120, "Pos"

RT 1.347



RT 1.346



Inj.Date 11/2/2021

N

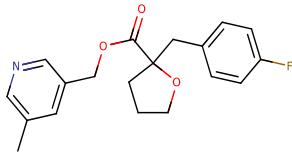
-SL-

Acq. Method C:\HPCHEM\ ->

->

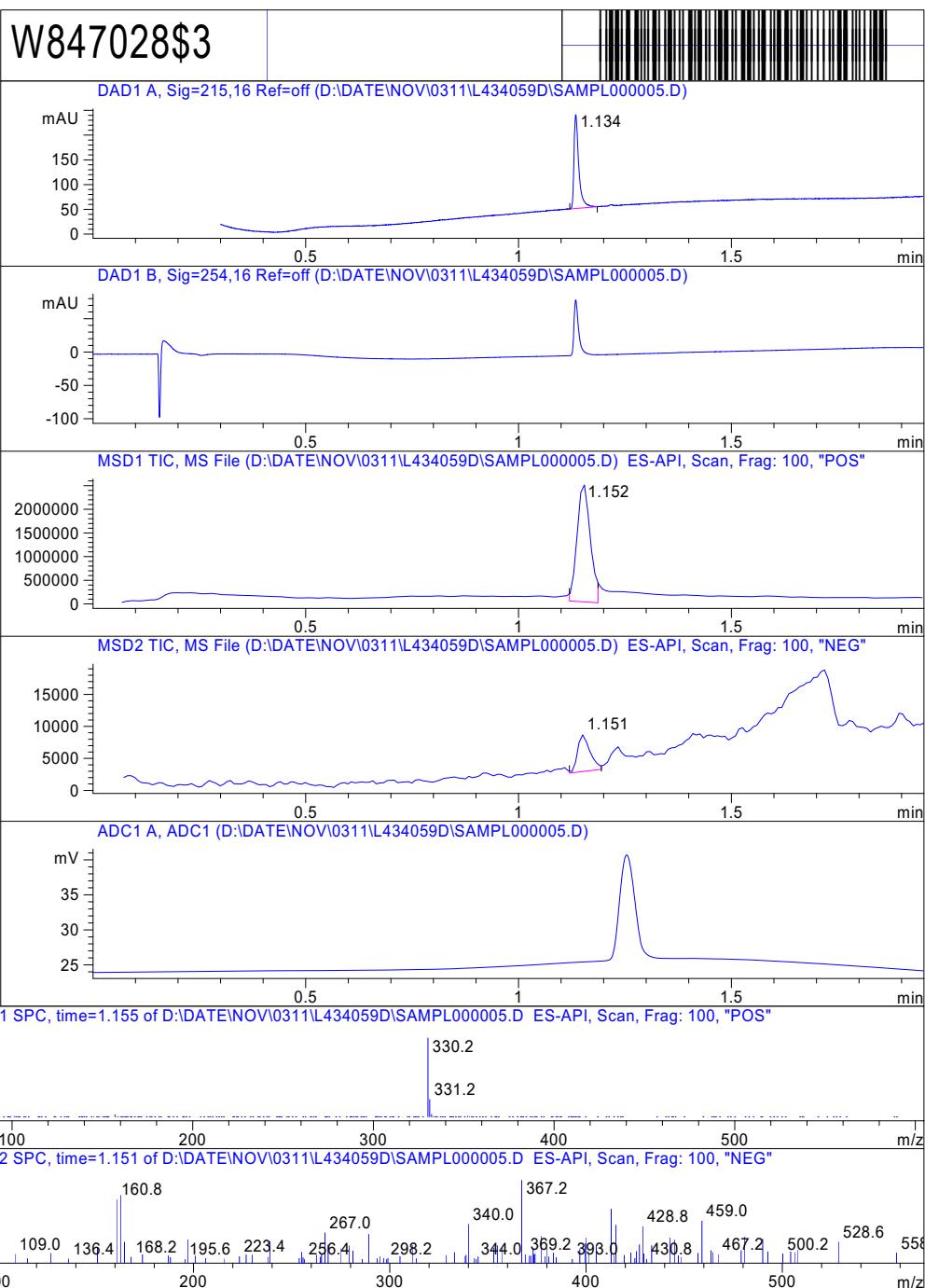
Z5385490967_

MaxPeak: 100.00%
Ret_Time: 1.134 min



Mol Wt 329.36
Exact Mass 329.17
Time Area%

1 1.134 100.00



Inj.Date 11/3/2021

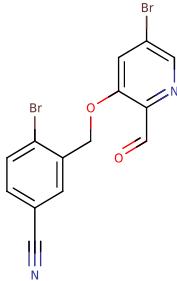
Y

- 4 -

Acq. Method C:\CHEM32\-> ->

Z3382155230_

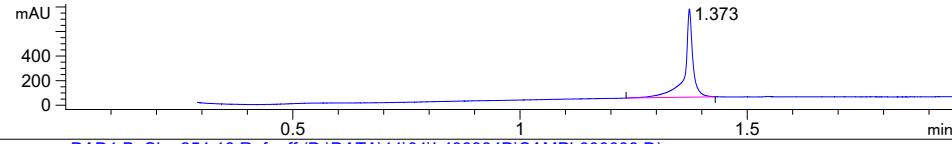
MaxPeak: 100.00%
Ret_Time: 1.373 min



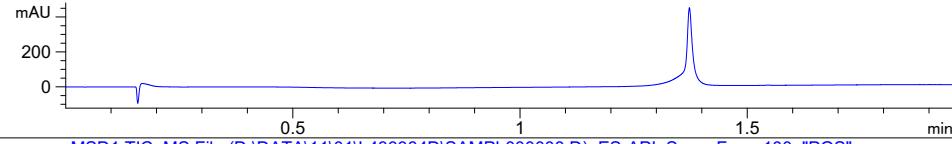
1 1.373 100.00

W753440\$1

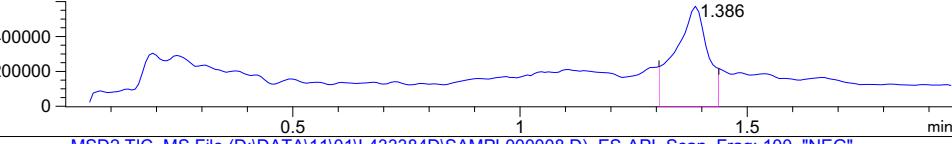
DAD1 A, Sig=215,16 Ref=off (D:\DATA\11\01\L433384D\SAMPL000008.D)



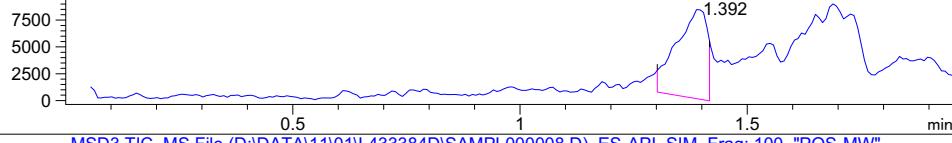
DAD1 B, Sig=254,16 Ref=off (D:\DATA\11\01\L433384D\SAMPL000008.D)



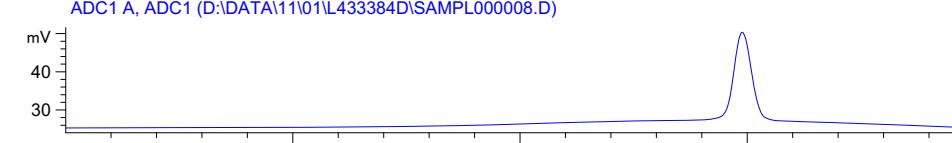
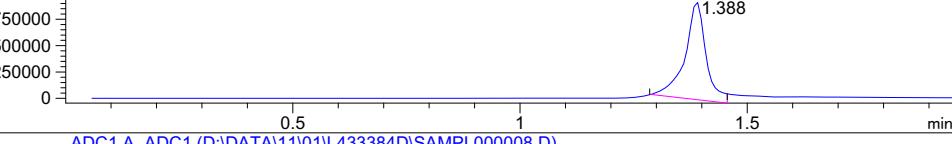
MSD1 TIC, MS File (D:\DATA\11\01\L433384D\SAMPL000008.D) ES-API, Scan, Frag: 100, "POS"



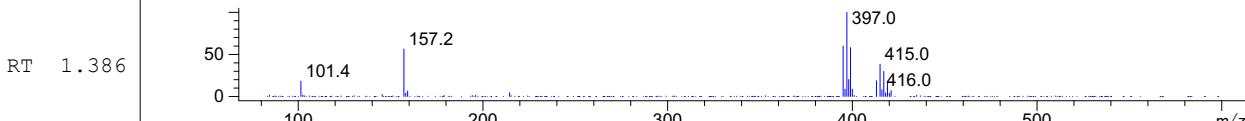
MSD2 TIC, MS File (D:\DATA\11\01\L433384D\SAMPL000008.D) ES-API, Scan, Frag: 100, "NEG"



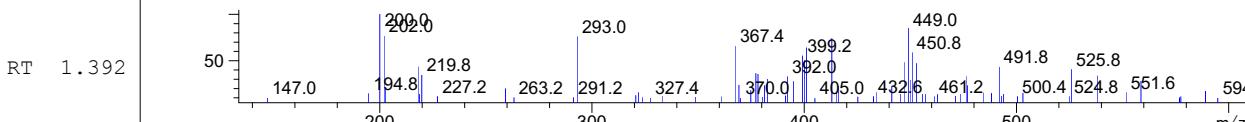
MSD3 TIC, MS File (D:\DATA\11\01\L433384D\SAMPL000008.D) ES-API, SIM, Frag: 100, "POS-MW"



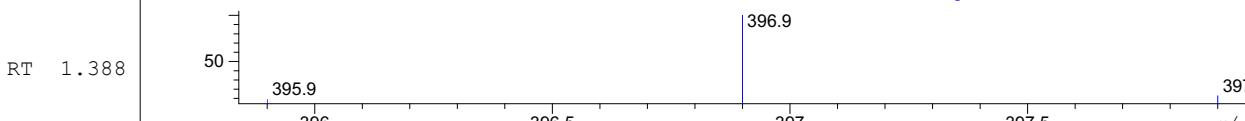
*MSD1 SPC, time=1.386 of D:\DATA\11\01\L433384D\SAMPL000008.D ES-API, Scan, Frag: 100, "POS"



*MSD2 SPC, time=1.388 of D:\DATA\11\01\L433384D\SAMPL000008.D ES-API, Scan, Frag: 100, "NEG"



*MSD3 SPC, time=1.391 of D:\DATA\11\01\L433384D\SAMPL000008.D ES-API, SIM, Frag: 100, "POS-MW"



Inj.Date 11/1/2021

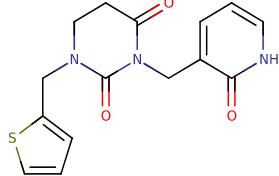
LB

- 4 -

Acq. Method C:\CHEM32\-> ->

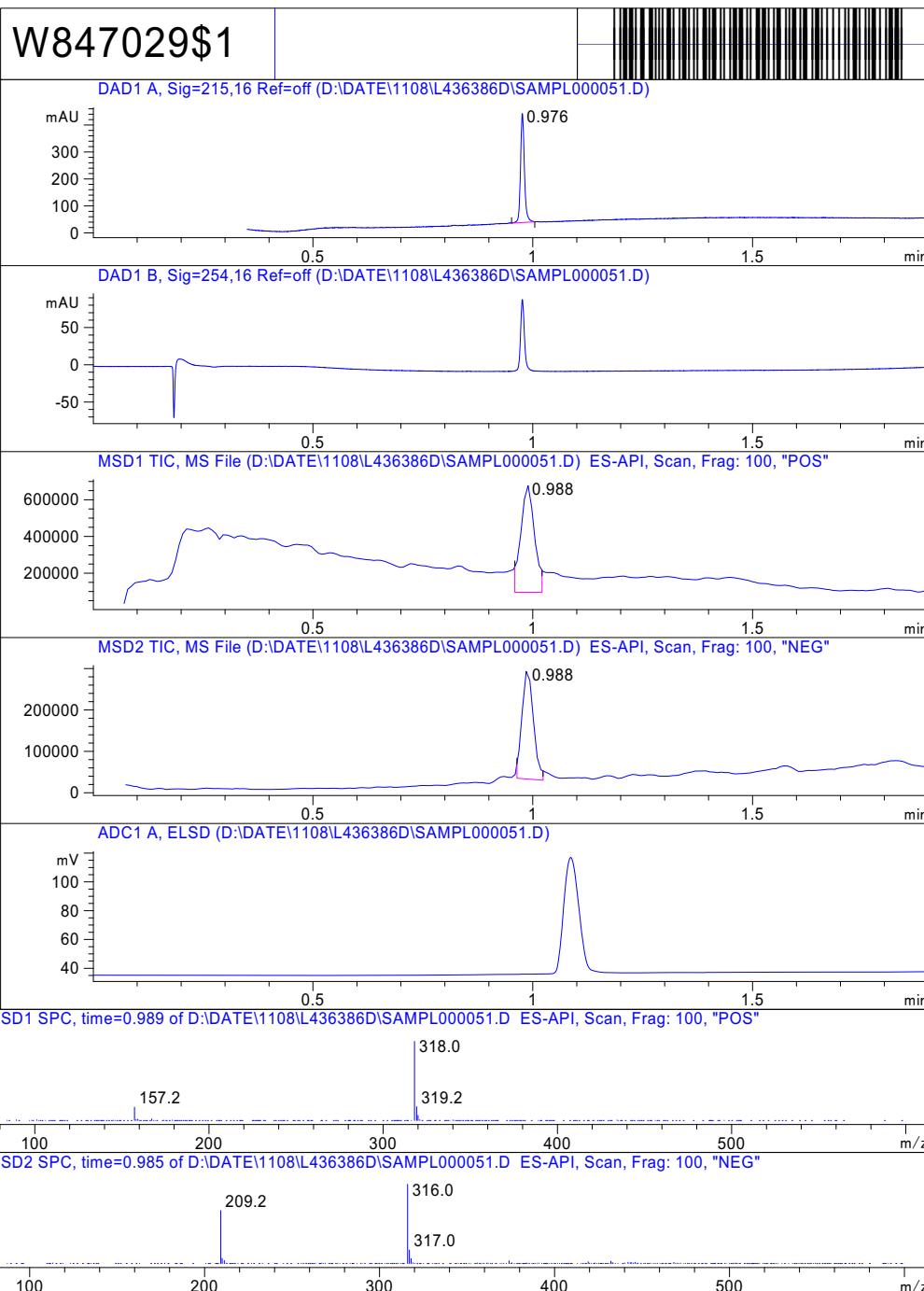
Z5009000158_

MaxPeak: 100.00%
Ret_Time: 0.976 min



Mol Wt 317.36
Exact Mass 317.09
Time Area%

1 0.976 100.00



Inj.Date 11/8/2021

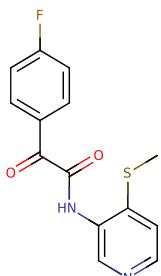
E

-5-

Acq. Method C:\CHEM32\-> ->

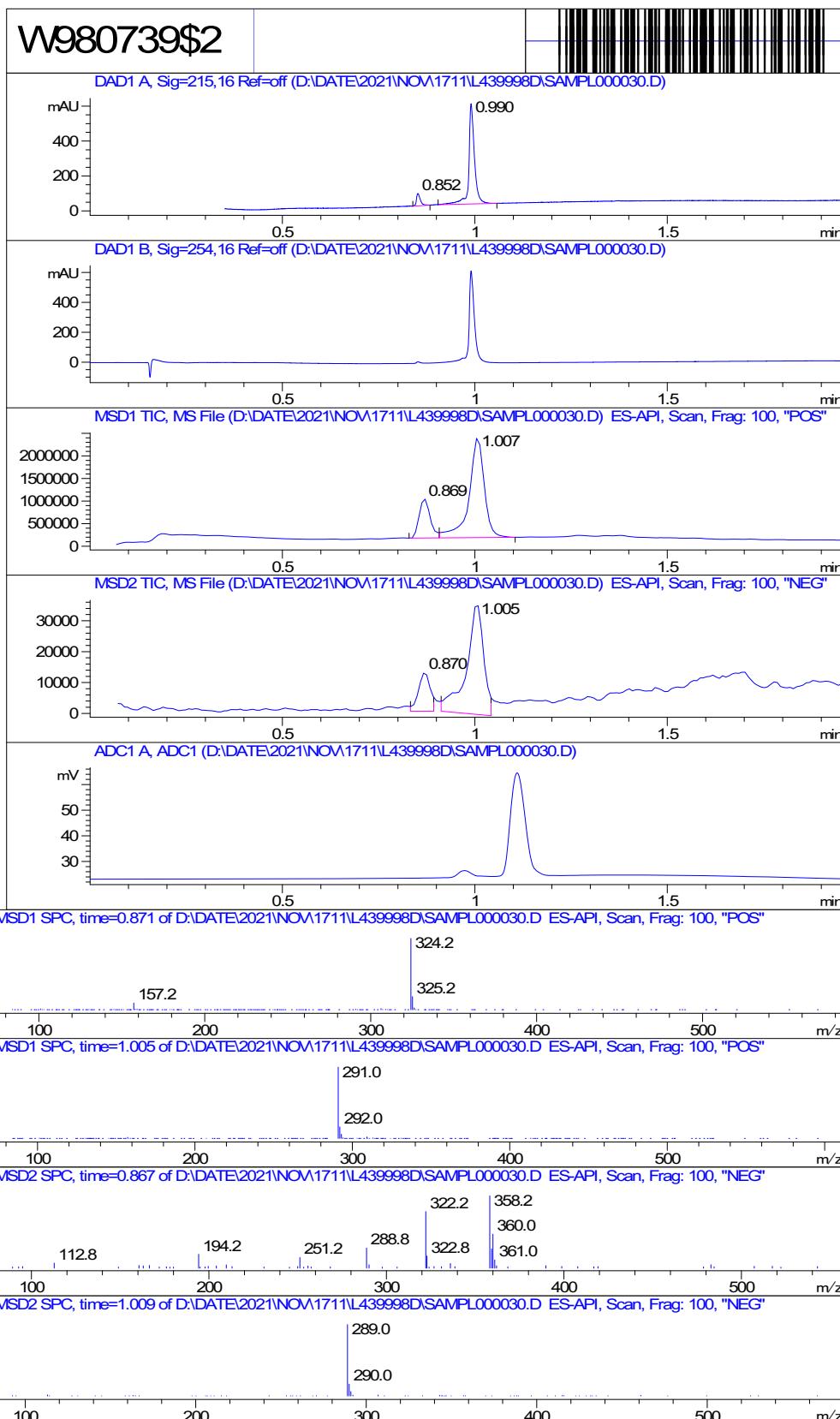
Z3535317212_

MaxPeak: 92.20%
Ret_Time: 0.990 min



Mol Wt 290.31
Exact Mass 290.06
Time Area%

1 0.852 7.80
2 0.990 92.20



Inj.Date 17-Nov-21

A

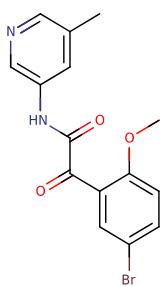
P2-D-03

- 4 -

Acq. Method C:\CHEM32\-> ->

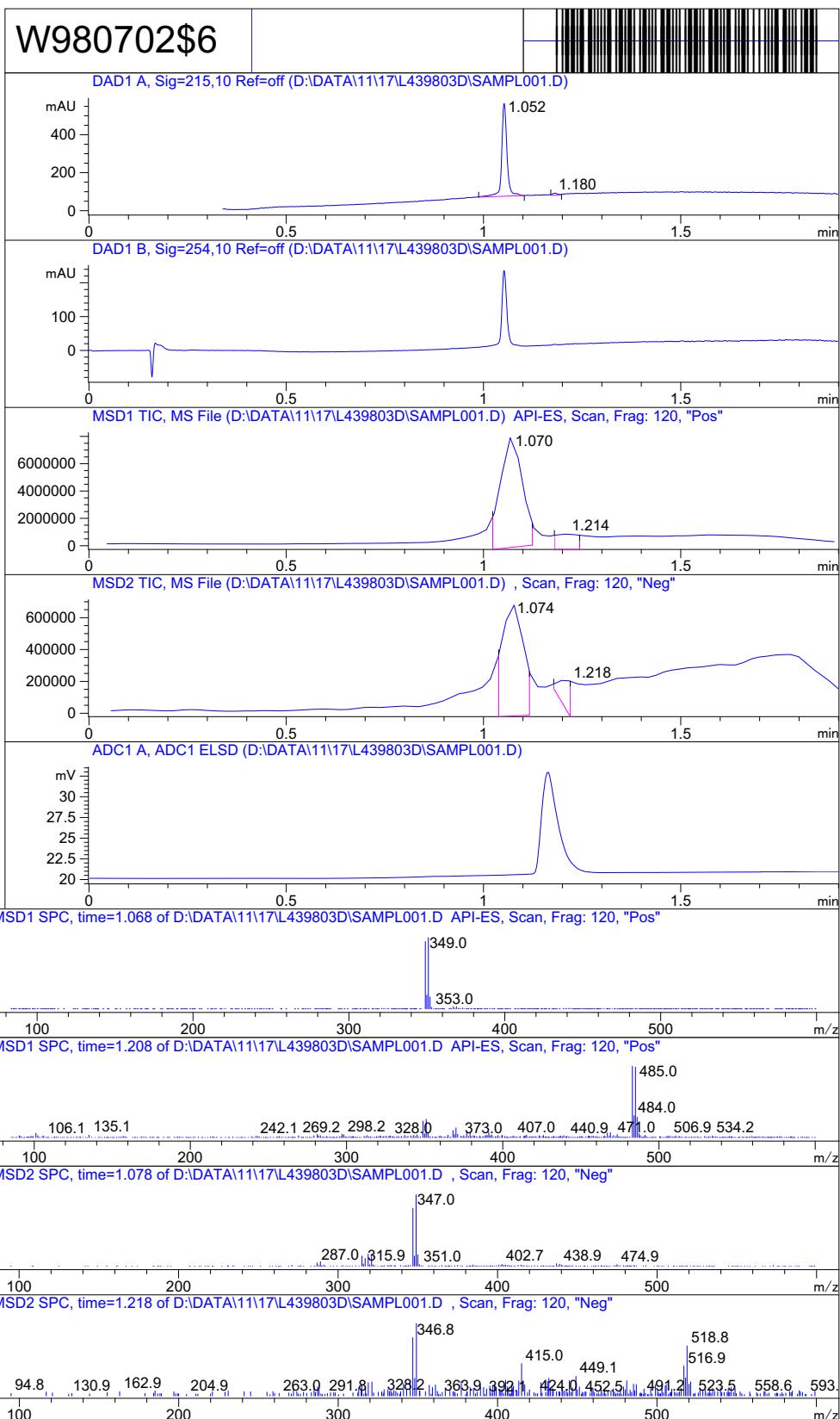
Z1669286714_

MaxPeak: 97.88%
Ret_Time: 1.052 min



Mol Wt 349.18
Exact Mass 348.02
Time Area%

1 1.052 97.88
2 1.180 2.12



Inj.Date 11/17/2021

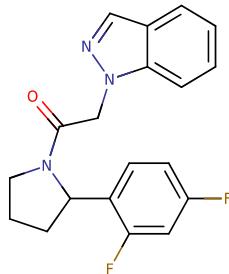
LB

-SL-

Acq. Method C:\HPCHEM\-> ->

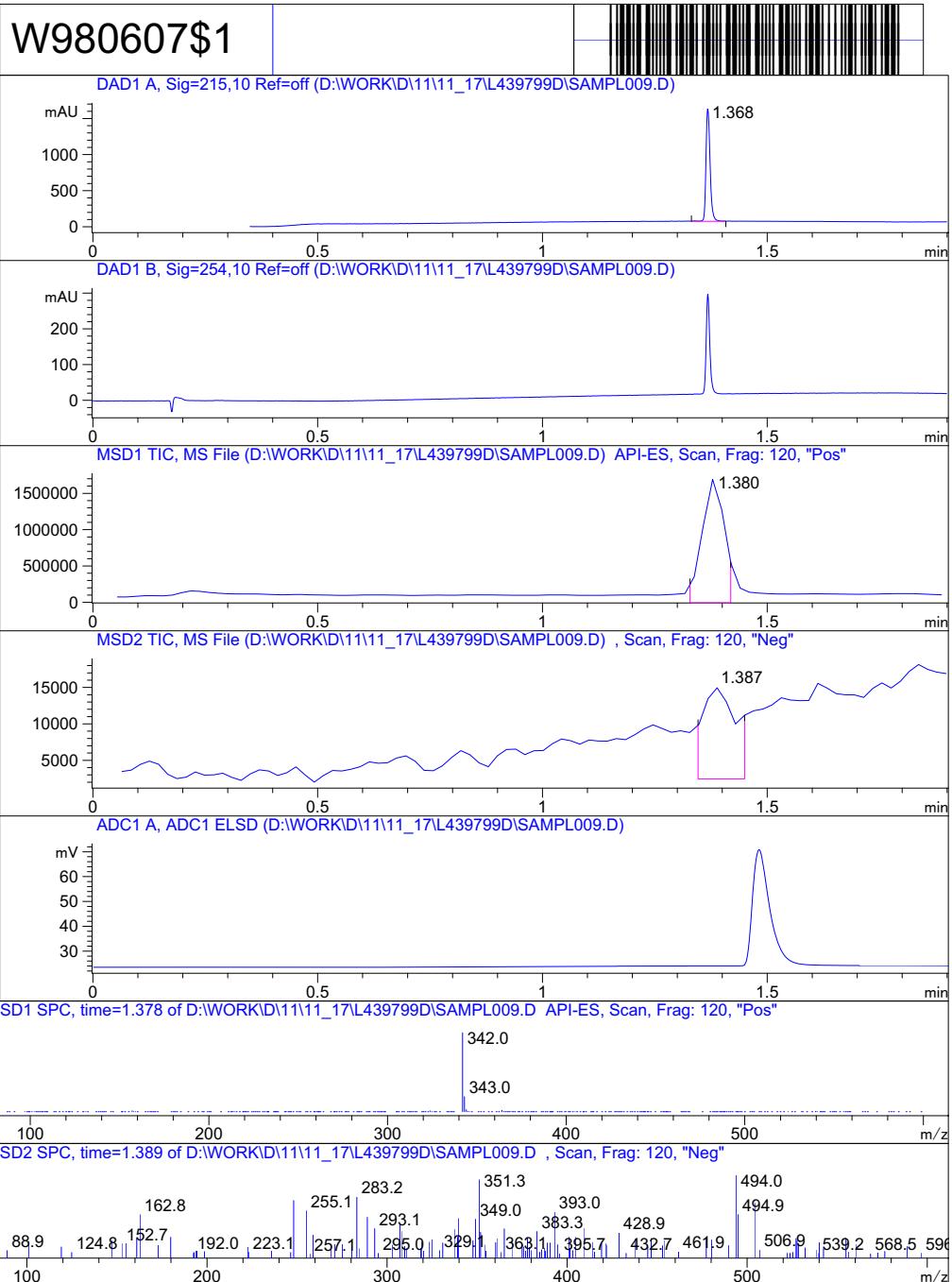
Z1355254448_

MaxPeak: 100.00%
Ret_Time: 1.368 min



Mol Wt 341.36
Exact Mass 341.16
Time Area%

1 1.368 100.00



Inj.Date 11/17/2021

K

P2-A-09

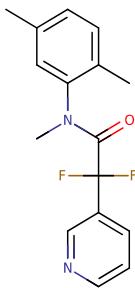
-VL-

Acq. Method C:\HPCHEM\ ->

->

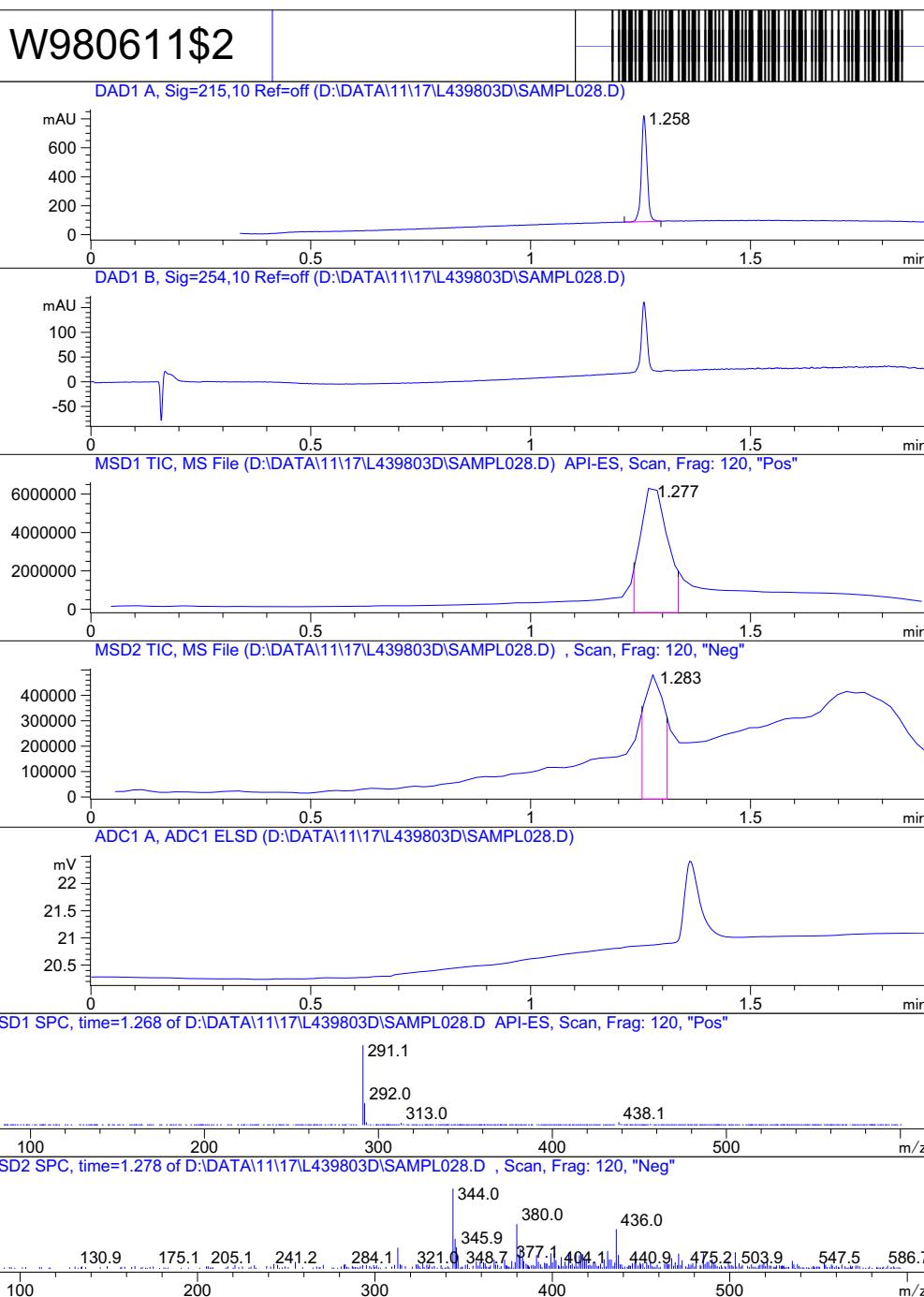
Z2298806057_

MaxPeak: 100.00%
Ret_Time: 1.258 min



Mol Wt 290.31
Exact Mass 290.15
Time Area%

1 1.258 100.00



Inj.Date 11/17/2021

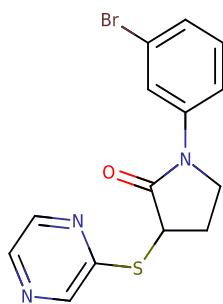
LB

-SL-

Acq. Method C:\HPCHEM\-> ->

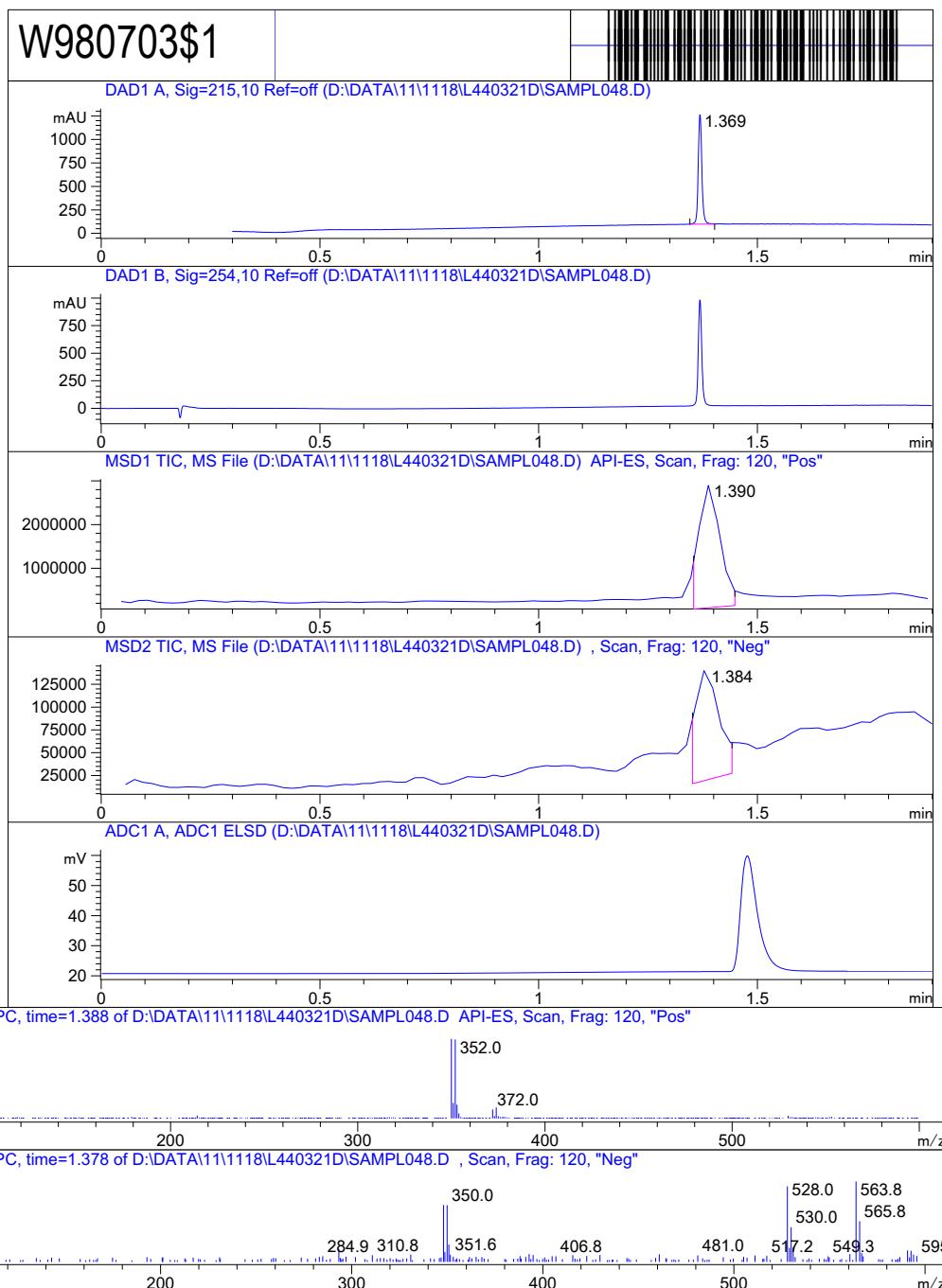
Z3079159560_

MaxPeak: 100.00%
Ret_Time: 1.369 min



Mol Wt 350.23
Exact Mass 351
Time Area%

1 1.369 100.00



Inj.Date 11/18/2021

LT

-SL-

Acq. Method C:\HPCHEM\ ->

->

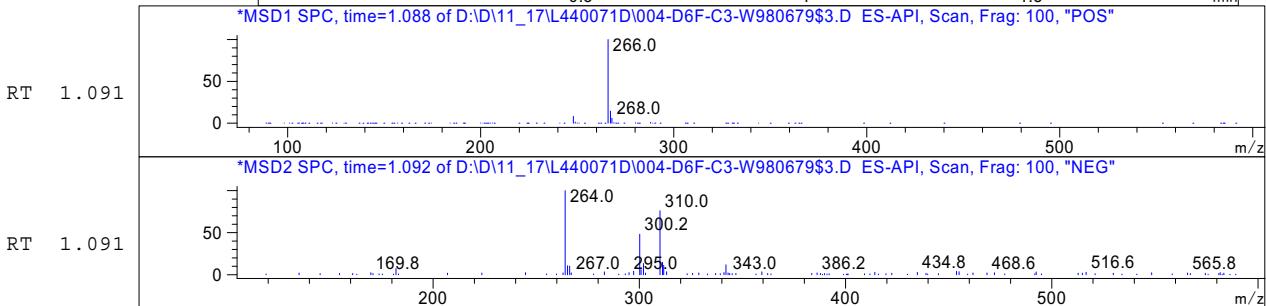
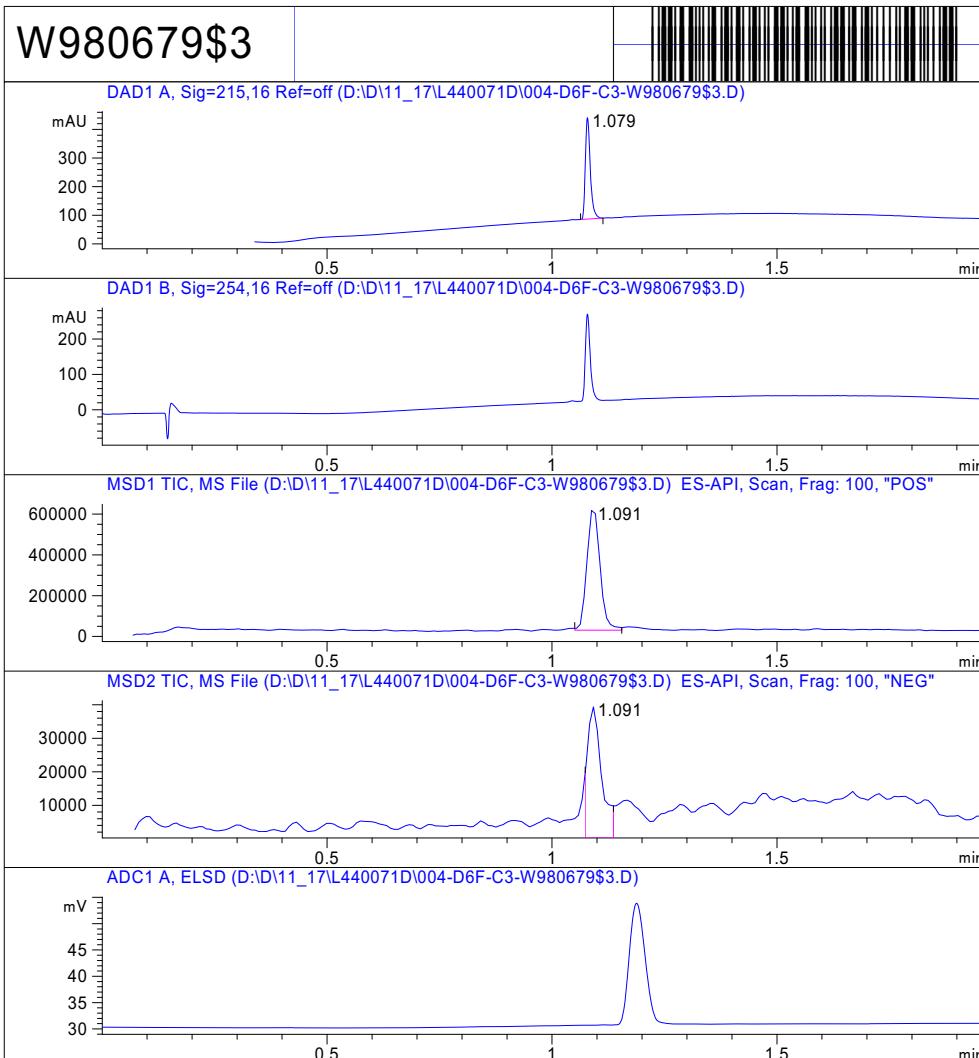
Z1872042935_

MaxPeak: 100.00%
Ret_Time: 1.079 min



Mol Wt 265.33
Exact Mass 265.1
Time Area%

1 1.079 100.00



Inj.Date 11/16/2021

N

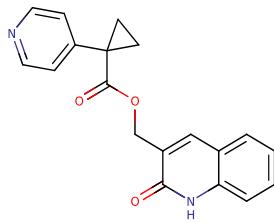
- 7 -

Acq. Method C:\Chem32\ ->

->

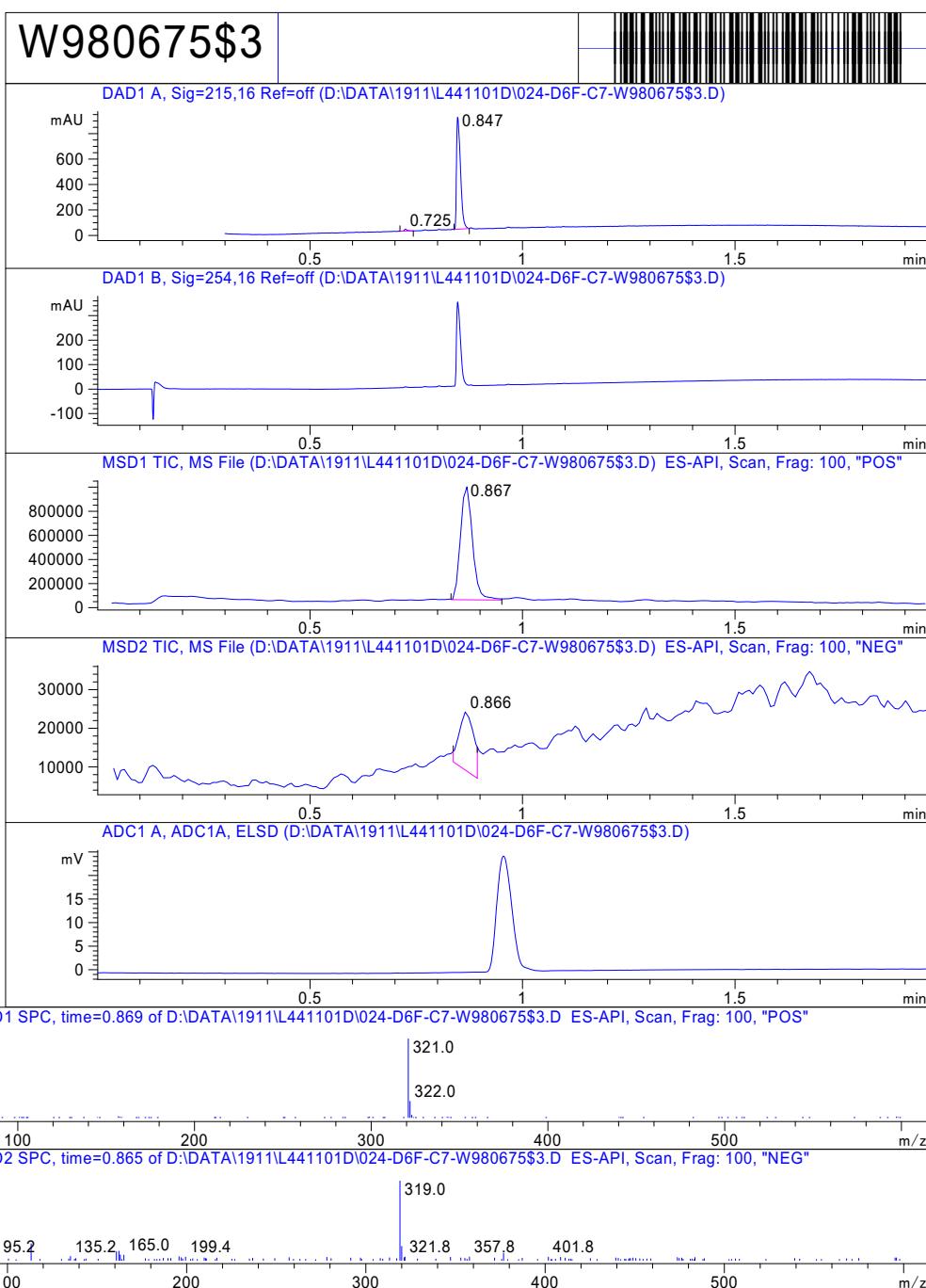
Z1716270280_

MaxPeak: 98.67%
Ret_Time: 0.847 min



Mol Wt 320.34
Exact Mass 320.13
Time Area%

#	Time	Area%
1	0.725	1.33
2	0.847	98.67



Inj.Date 11/19/2021

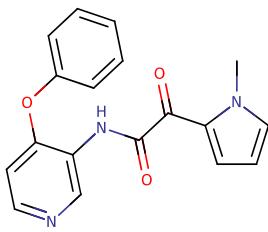
H

-25-

Acq. Method C:\Users\ -> ->

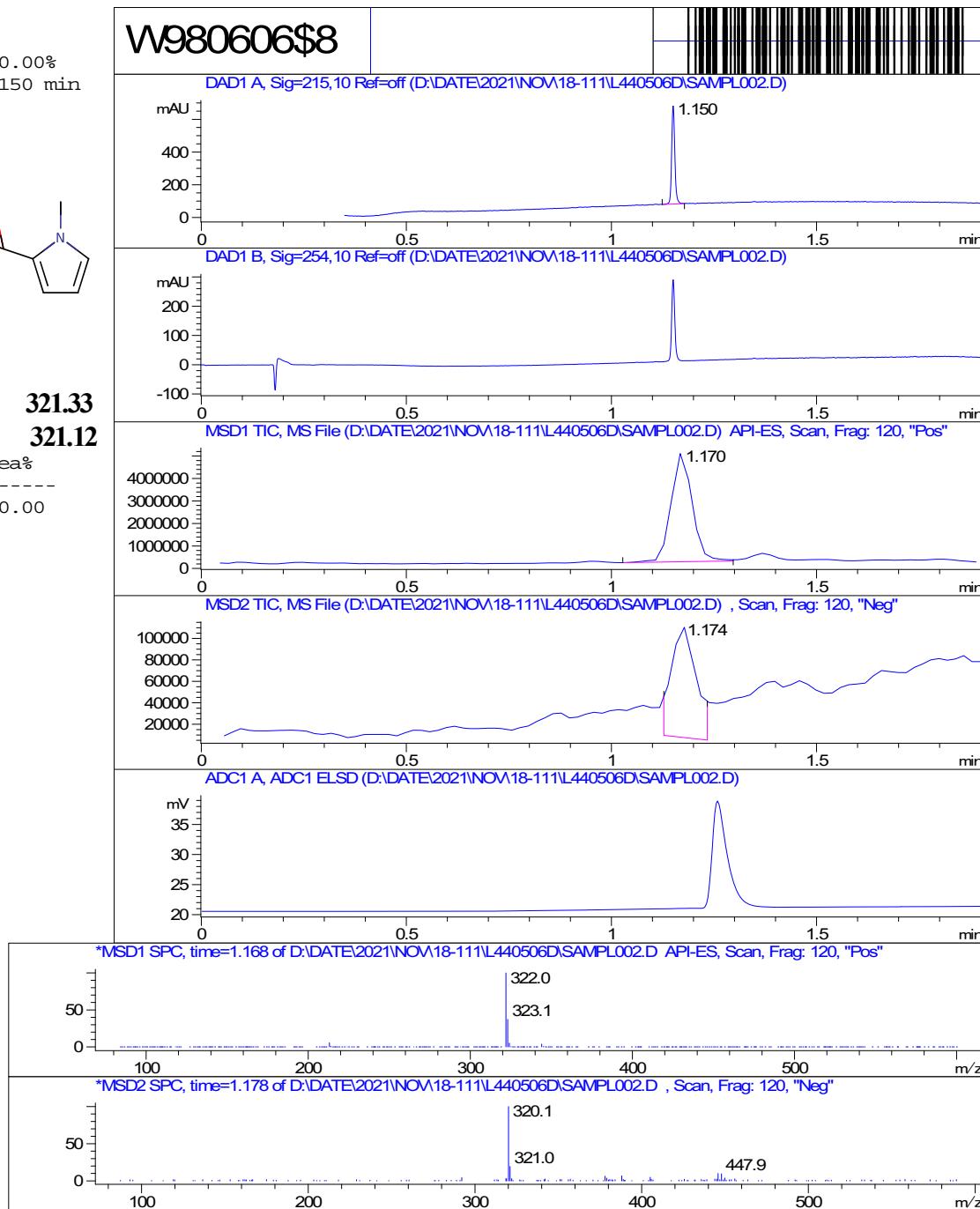
Z5420228488_

MaxPeak: 100.00%
Ret_Time: 1.150 min



Mol Wt 321.33
Exact Mass 321.12
Time Area%

1 1.150 100.00



Inj .Date 18-Nov-21

A

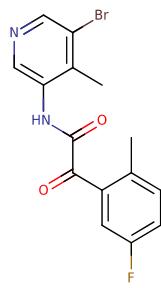
P2-A-02

-SL-

Acq. Method C:\HPCHEM\-> ->

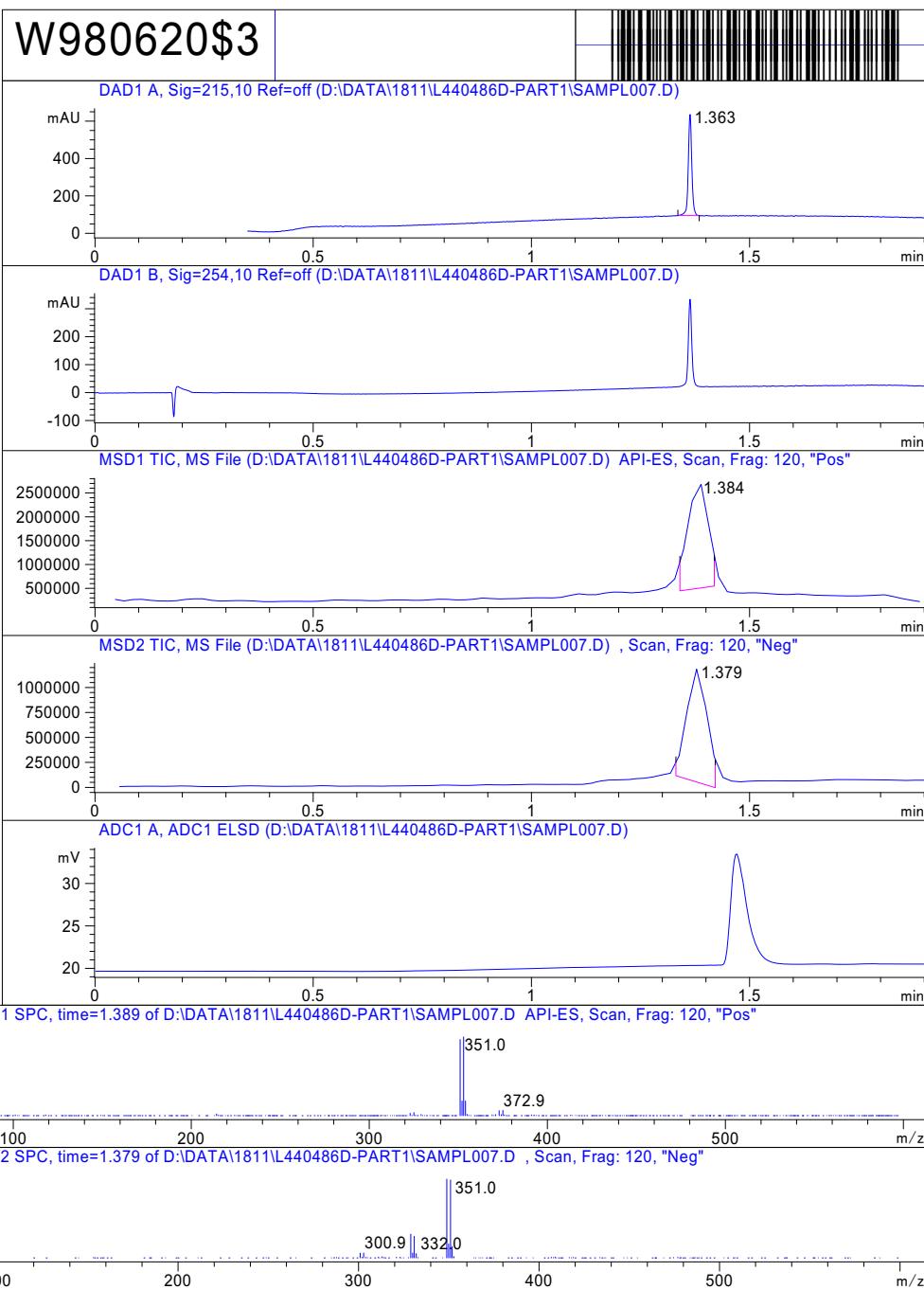
Z2195811405_

MaxPeak: 100.00%
Ret_Time: 1.363 min



Mol Wt 351.17
Exact Mass 350.02
Time Area%

1 1.363 100.00



Inj.Date 11/18/2021

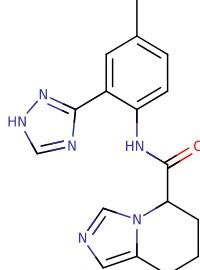
H

-SL-

Acq. Method C:\HPCHEM\-> ->

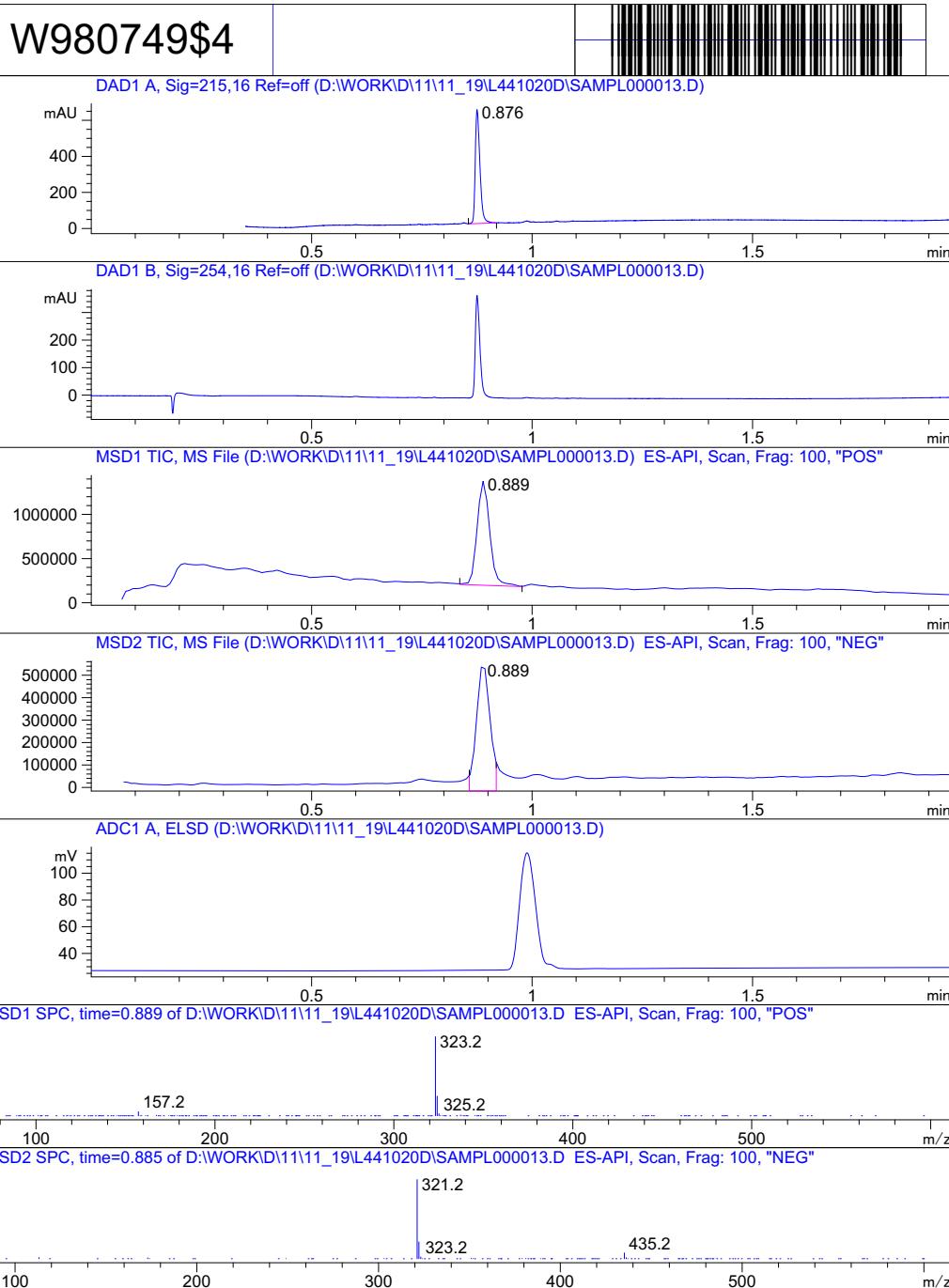
Z5420225795_

MaxPeak: 100.00%
Ret_Time: 0.876 min



Mol Wt 322.36
Exact Mass 322.17
Time Area%

1 0.876 100.00



Inj.Date 11/19/2021

K

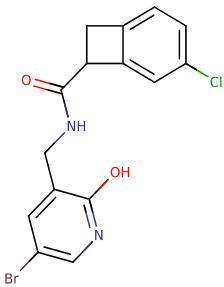
P2-B-04

-5-

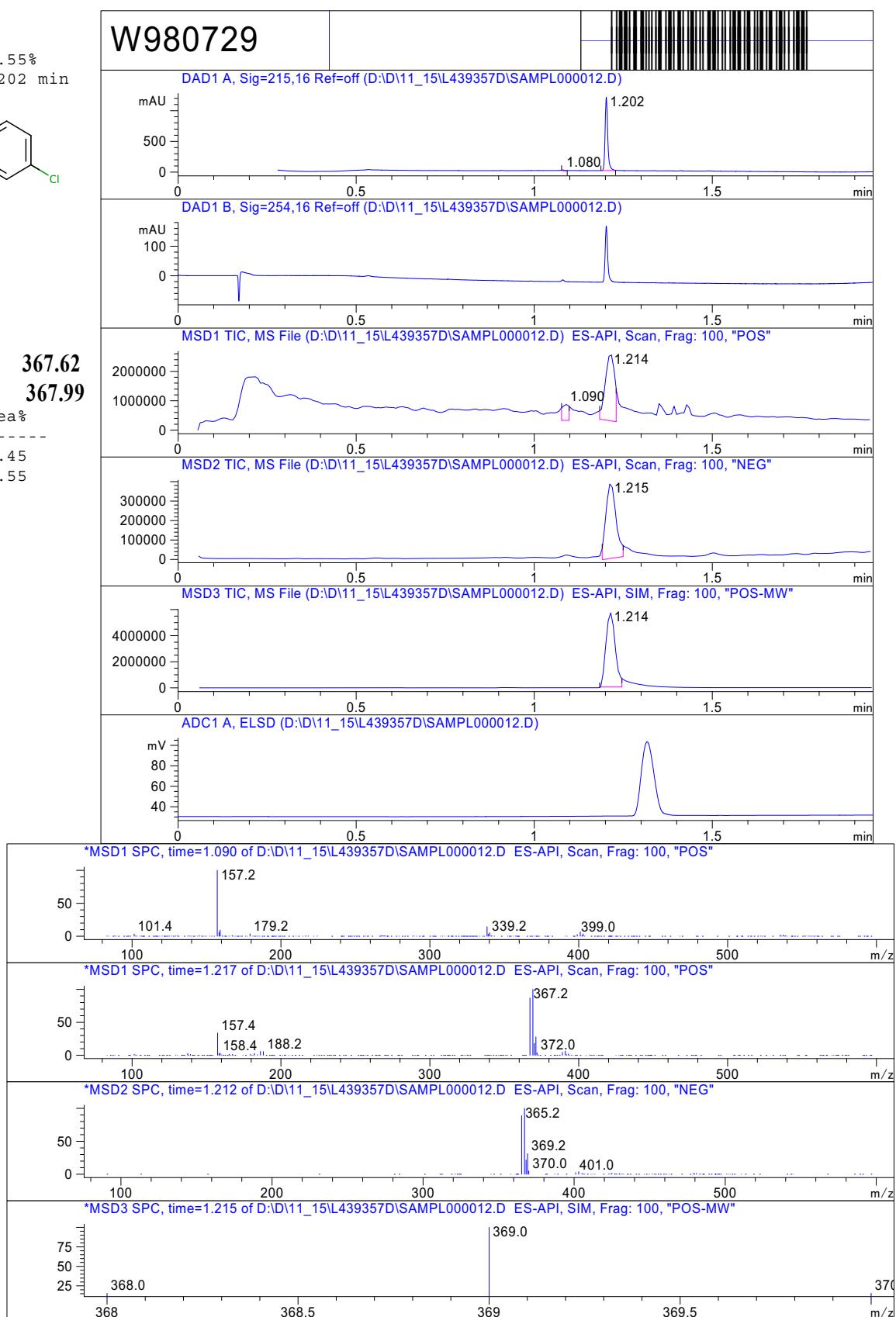
Acq. Method C:\CHEM32\ -> ->

Z4289708272_

MaxPeak: 98.55%
Ret_Time: 1.202 min



Mol Wt 367.62
Exact Mass 367.99
Time Area%
1 1.080 1.45
2 1.202 98.55



Inj.Date 11/15/2021

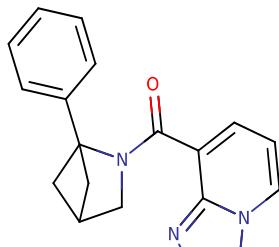
N

-3-

Acq. Method C:\CHEM32\ -> ->

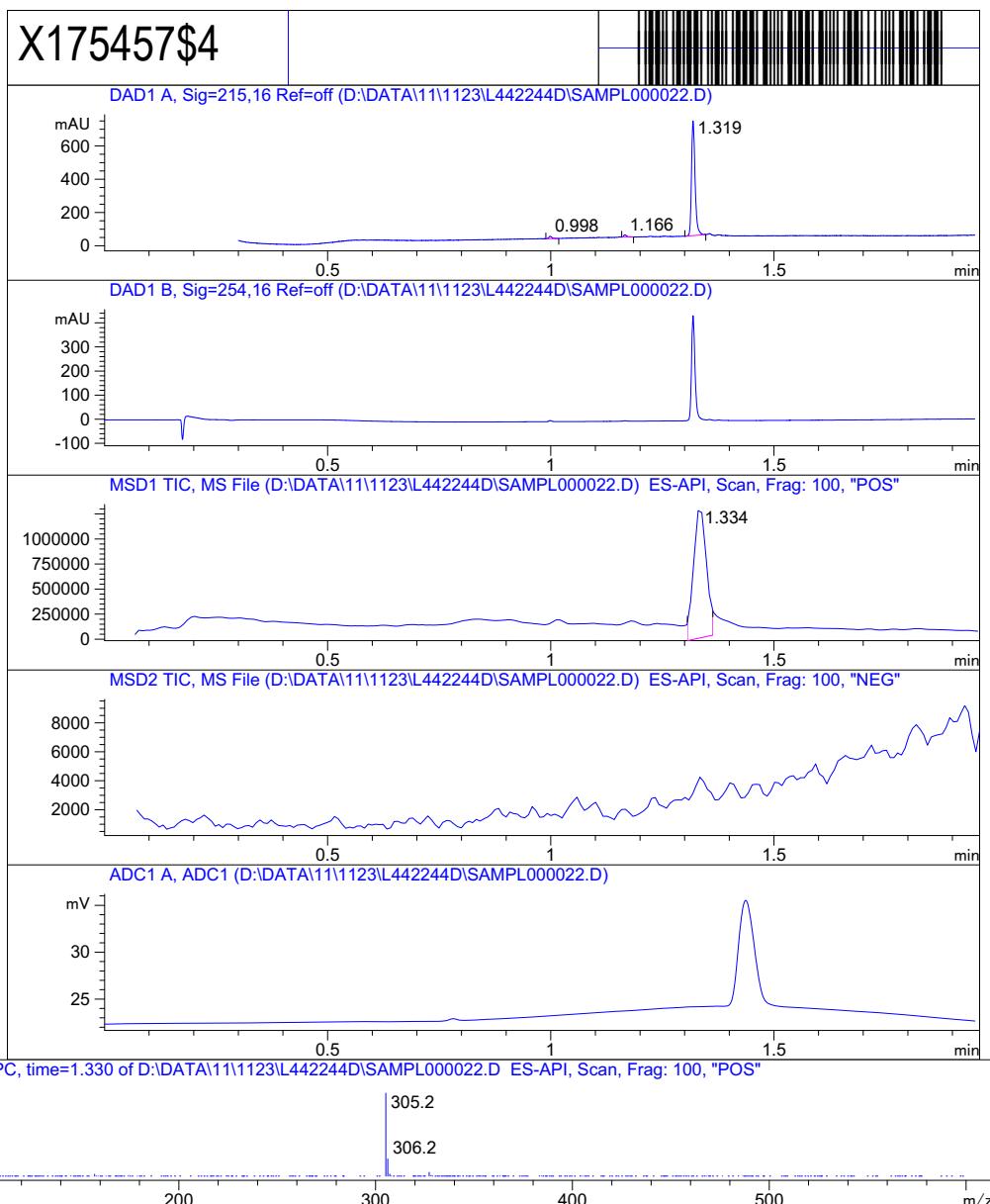
Z5420225639_

MaxPeak: 96.28%
Ret_Time: 1.319 min



Mol Wt 304.35
Exact Mass 304.15
Time Area%

1 0.998 1.94
2 1.166 1.79
3 1.319 96.28



Inj.Date 11/22/2021

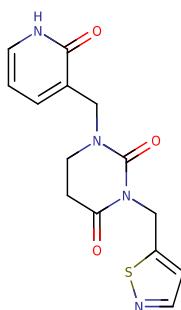
LT

- 4 -

Acq. Method C:\CHEM32\-> ->

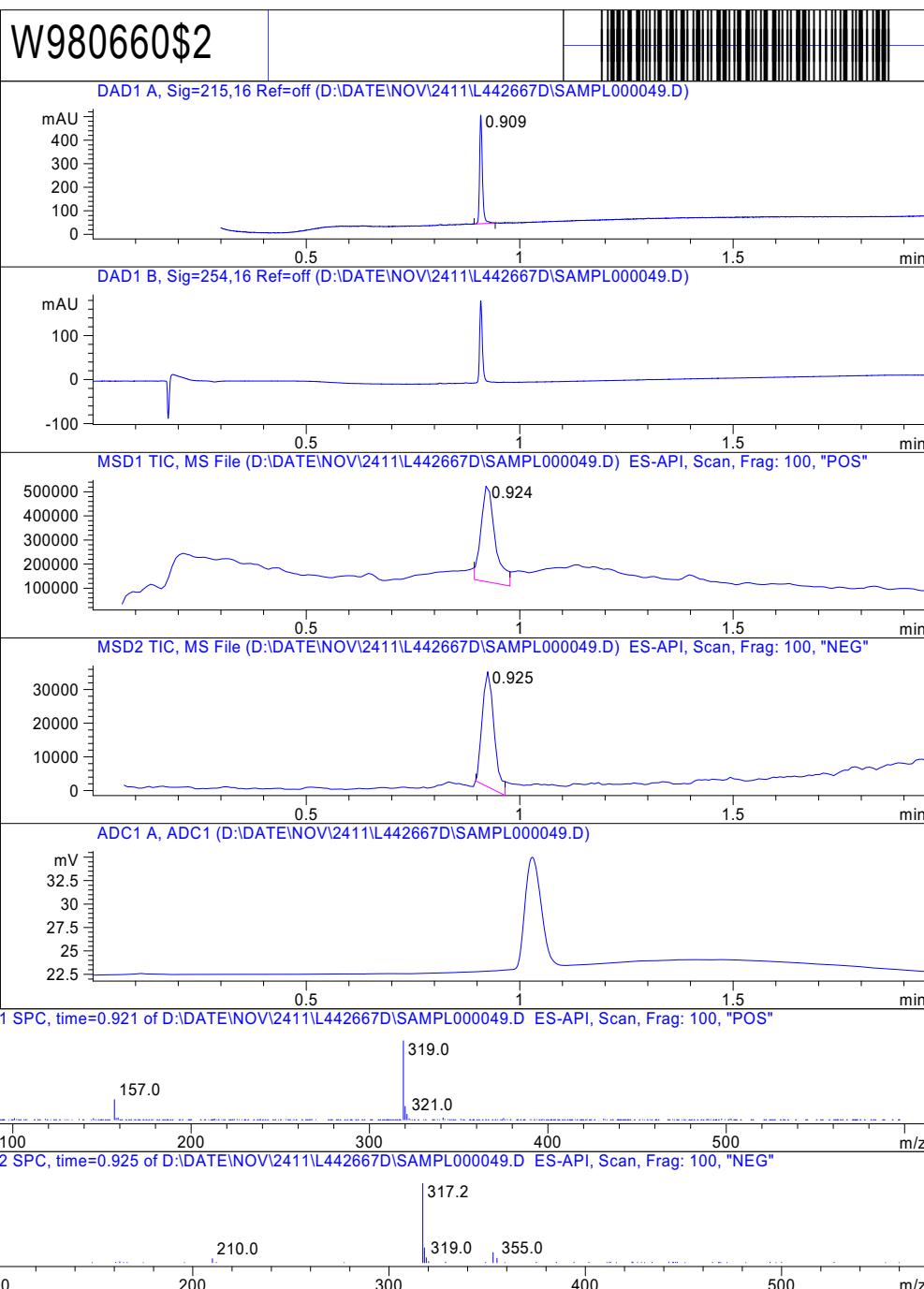
Z3555684465_

MaxPeak: 100.00%
Ret_Time: 0.909 min



Mol Wt 318.35
Exact Mass 318.08
Time Area%

1 0.909 100.00



Inj.Date 11/23/2021

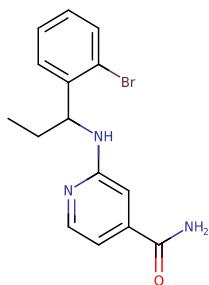
Y

- 4 -

Acq. Method C:\CHEM32\-> ->

Z3541227016_

MaxPeak: 98.00%
Ret_Time: 0.869 min

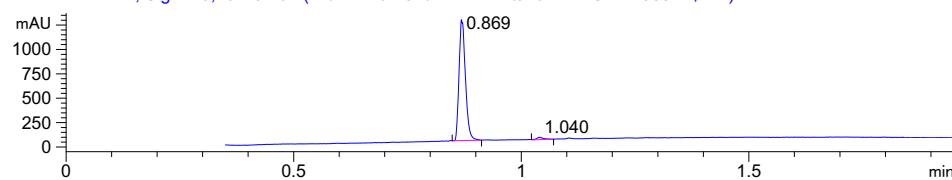


Mol Wt 334.21
Exact Mass 333.07
Time Area%

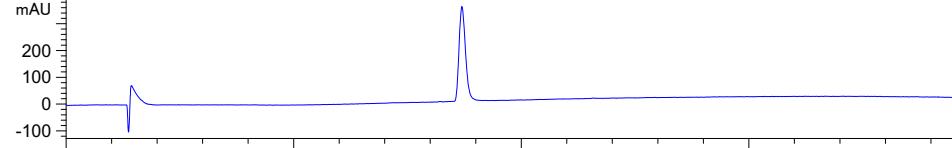
1 0.869 98.00
2 1.040 2.00

X238577\$2

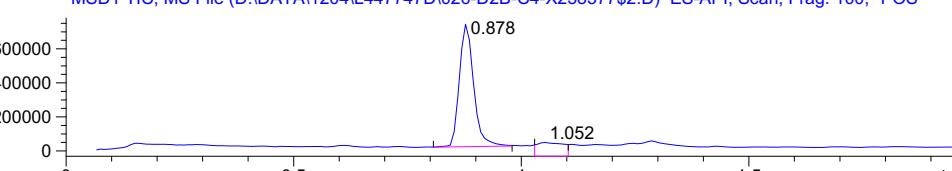
DAD1 A, Sig=215,16 Ref=off (D:\DATA\1204\447747D\026-D2B-C4-X238577\$2.D)



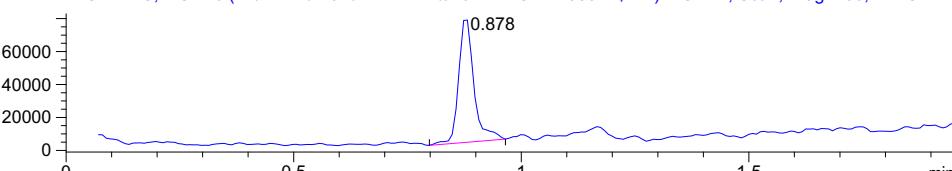
DAD1 B, Sig=254,16 Ref=off (D:\DATA\1204\447747D\026-D2B-C4-X238577\$2.D)



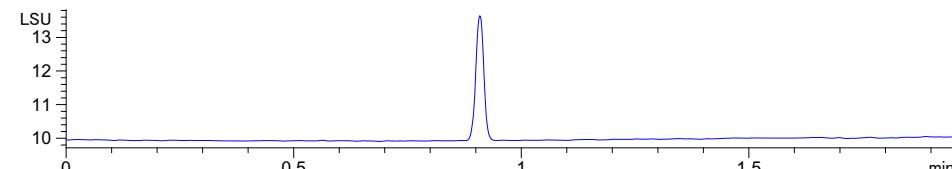
MSD1 TIC, MS File (D:\DATA\1204\447747D\026-D2B-C4-X238577\$2.D) ES-API, Scan, Frag: 100, "POS"



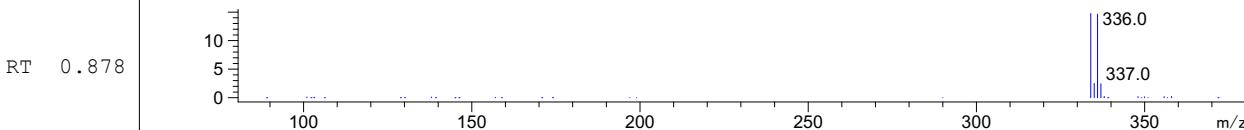
MSD2 TIC, MS File (D:\DATA\1204\447747D\026-D2B-C4-X238577\$2.D) ES-API, Scan, Frag: 100, "NEG"



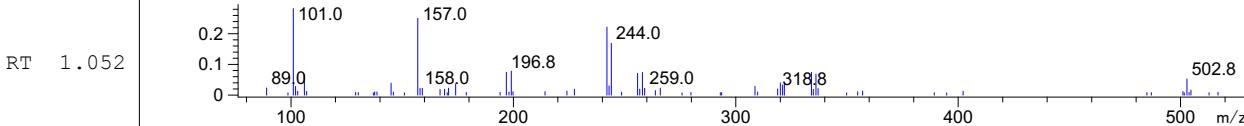
ELS1 A, ELS1A, ELSD Signal (D:\DATA\1204\447747D\026-D2B-C4-X238577\$2.D)



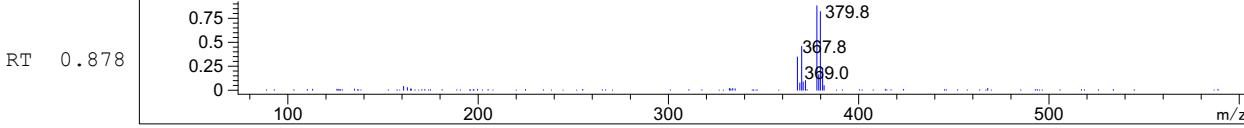
*MSD1 SPC, time=0.878 of D:\DATA\1204\447747D\026-D2B-C4-X238577\$2.D ES-API, Scan, Frag: 100, "POS"



*MSD1 SPC, time=1.053 of D:\DATA\1204\447747D\026-D2B-C4-X238577\$2.D ES-API, Scan, Frag: 100, "POS"



*MSD2 SPC, time=0.882 of D:\DATA\1204\447747D\026-D2B-C4-X238577\$2.D ES-API, Scan, Frag: 100, "NEG"



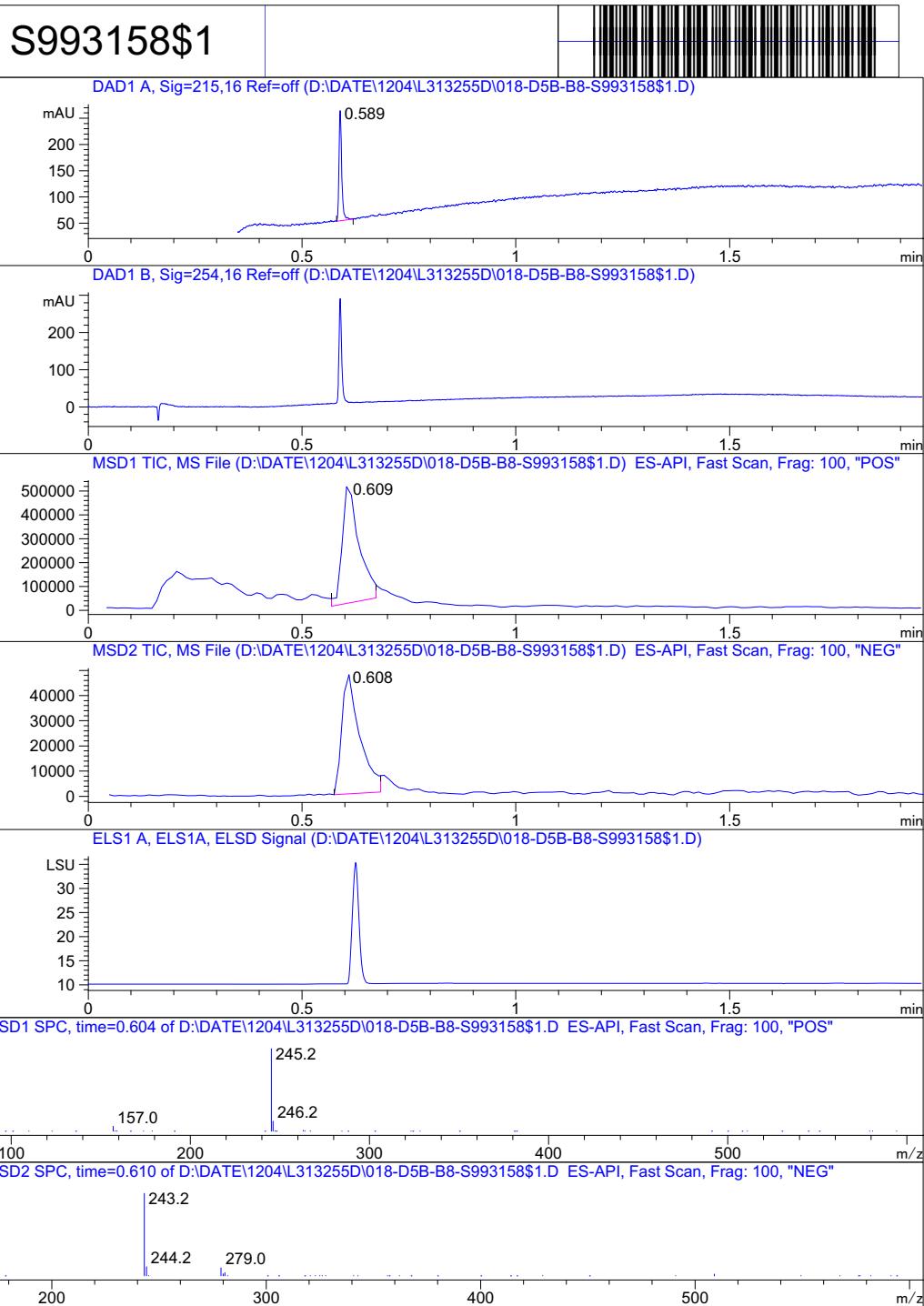
MaxPeak: 100.00%
Ret_Time: 0.589 min



Mol Wt 244.25
Exact Mass 244.11

Time Area%

1 0.589 100.00



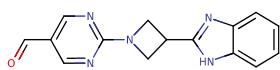
Inj.Date 12/3/2020

O

Acq. Method C:\Users\ -> ->

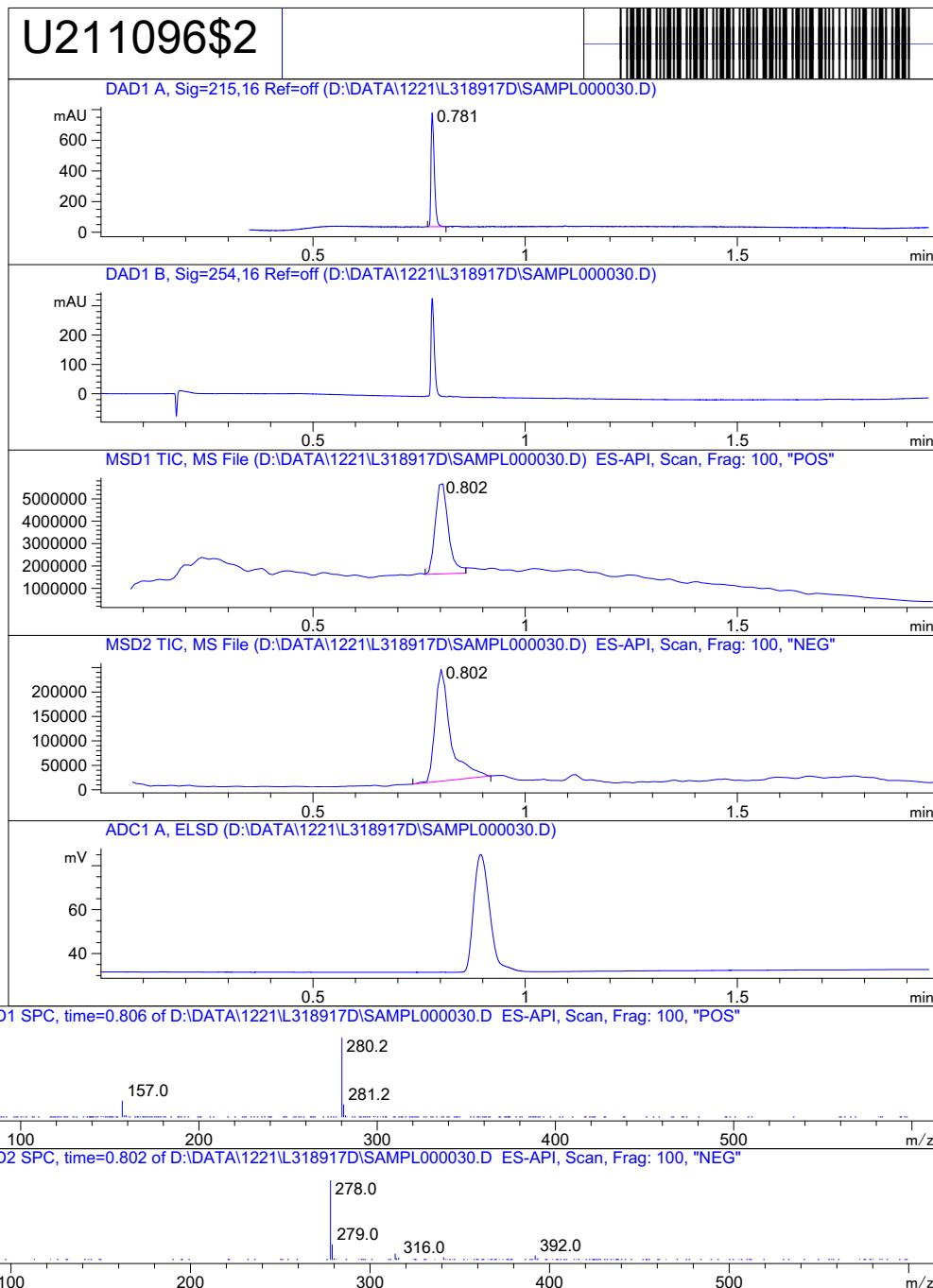
Z2974471486_

MaxPeak: 100.00%
Ret_Time: 0.781 min



Mol Wt 279.3
Exact Mass 279.12
Time Area%

1 0.781 100.00



Inj.Date 12/19/2020

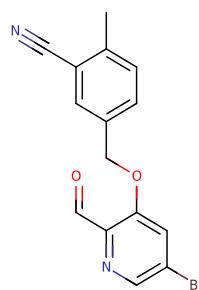
M

- 3 -

Acq. Method C:\CHEM32\ -> ->

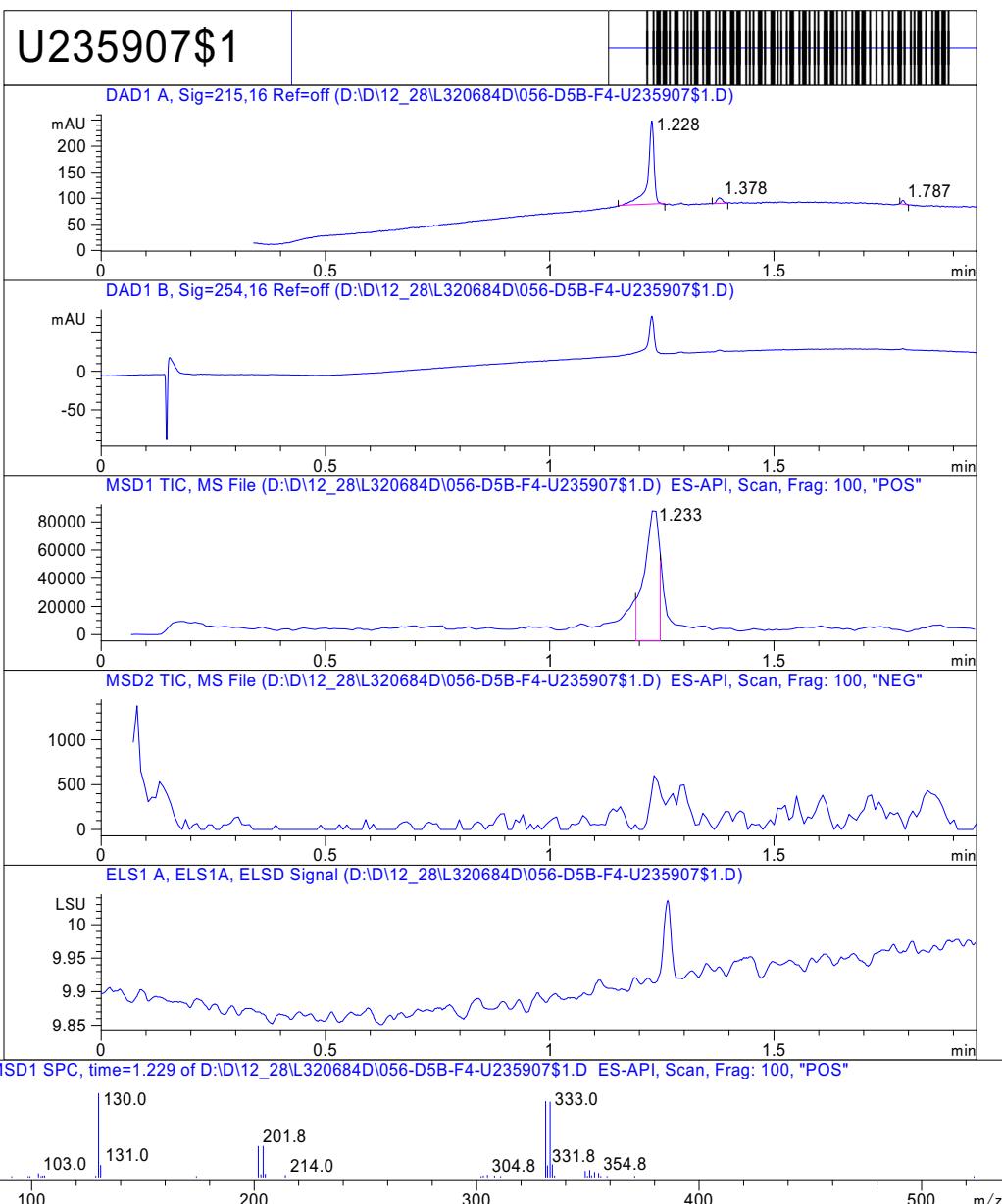
Z4497433835_

MaxPeak: 92.45%
Ret_Time: 1.228 min



Mol Wt 331.16
Exact Mass 330.01
Time Area%

1 1.228 92.45
2 1.378 5.40
3 1.787 2.15



Inj.Date 12/25/2020

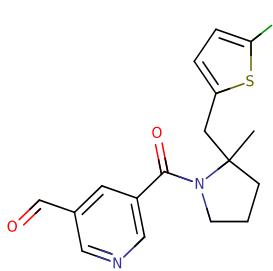
N

-1.8-

Acq. Method C:\Chem32\ -> ->

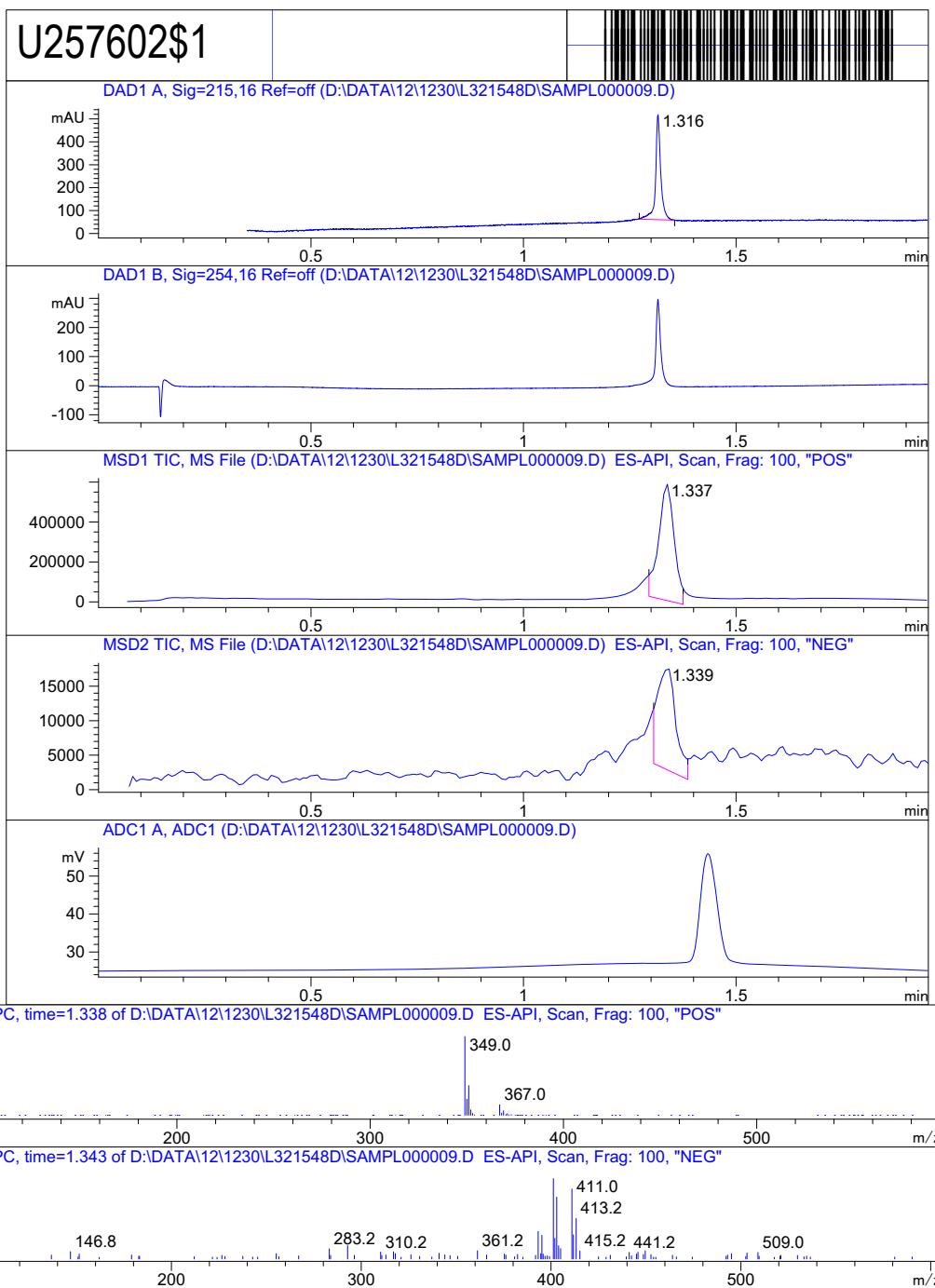
Z4767502624_

MaxPeak: 100.00%
Ret_Time: 1.316 min



Mol Wt 348.85
Exact Mass 348.09
Time Area%

1 1.316 100.00



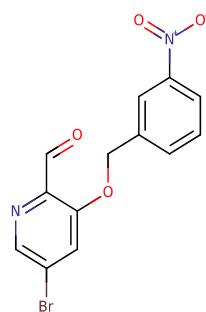
Inj.Date 12/30/2020

LT

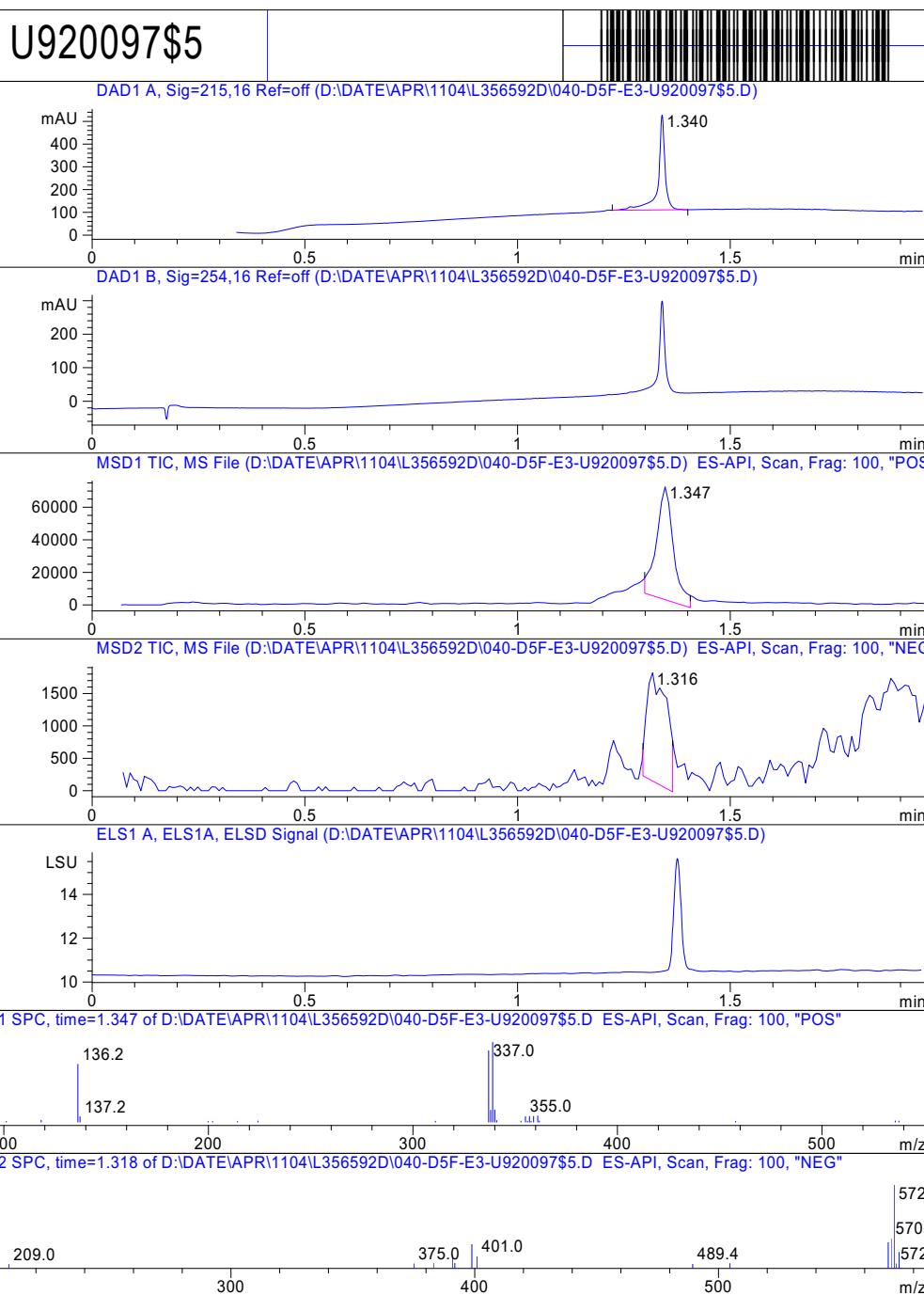
- 4 - Acq. Method C:\CHEM32\-> ->

Z2962685976_

MaxPeak: 100.00%
Ret_Time: 1.340 min



Mol Wt 337.13
Exact Mass 335.97
Time Area%
1 1.340 100.00



Inj.Date 4/11/2021

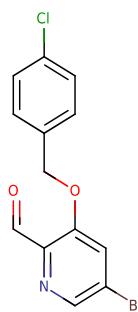
Y

-14-

Acq. Method C:\Chem32\ -> ->

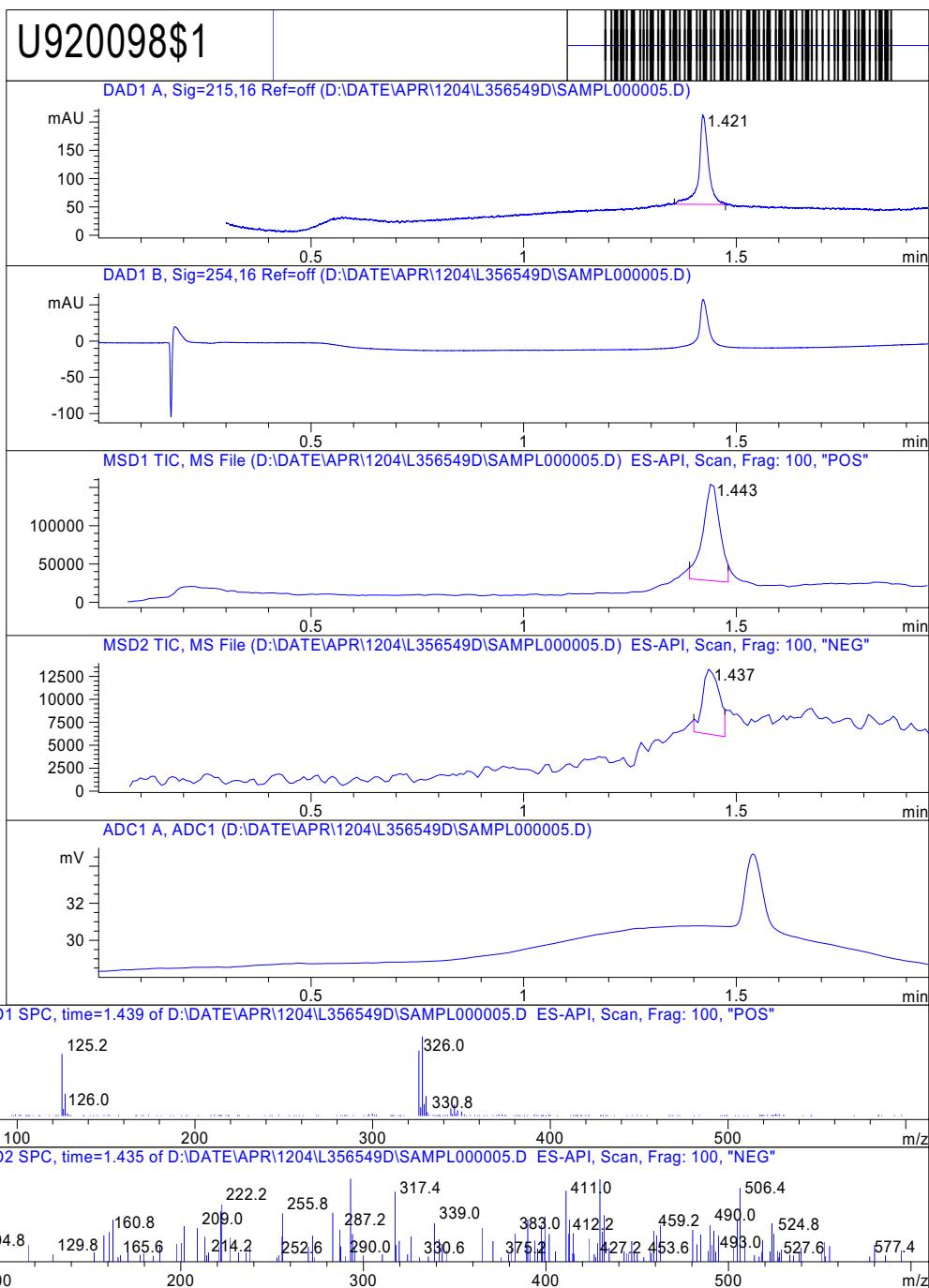
Z4954569112_

MaxPeak: 100.00%
Ret_Time: 1.421 min

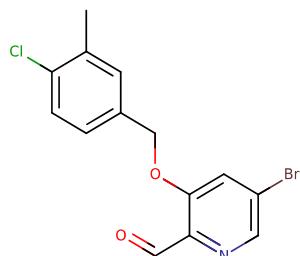


Mol Wt 326.57
Exact Mass 326.96
Time Area%

1 1.421 100.00

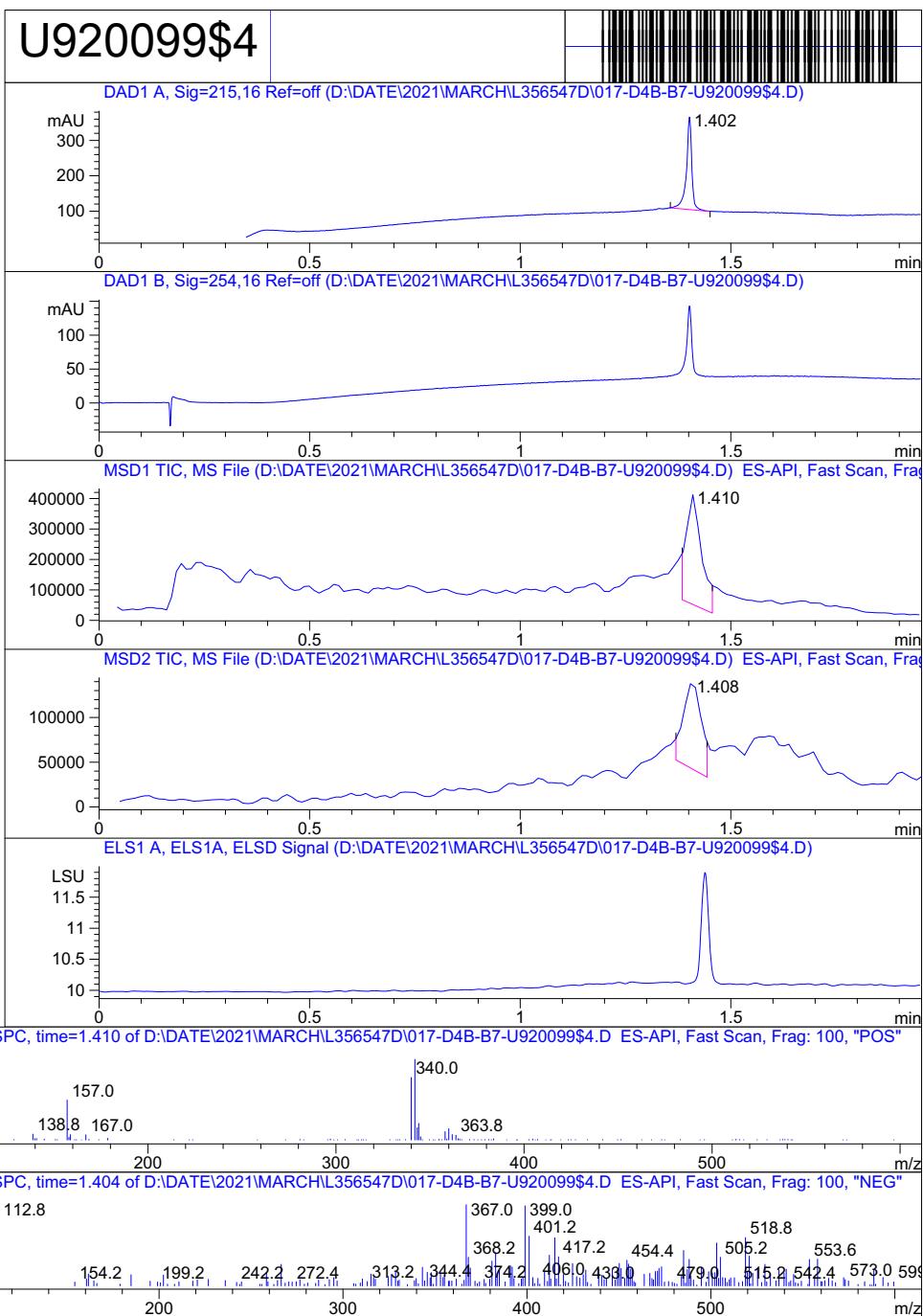


MaxPeak: 100.00%
Ret_Time: 1.402 min



Mol Wt 340.6
Exact Mass 340.98
Time Area%

1 1.402 100.00



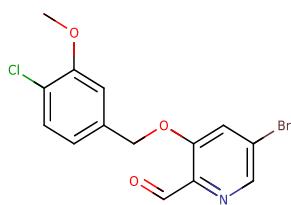
Inj.Date 4/11/2021

T <invalid>

Acq. Method C:\Users\ -> ->

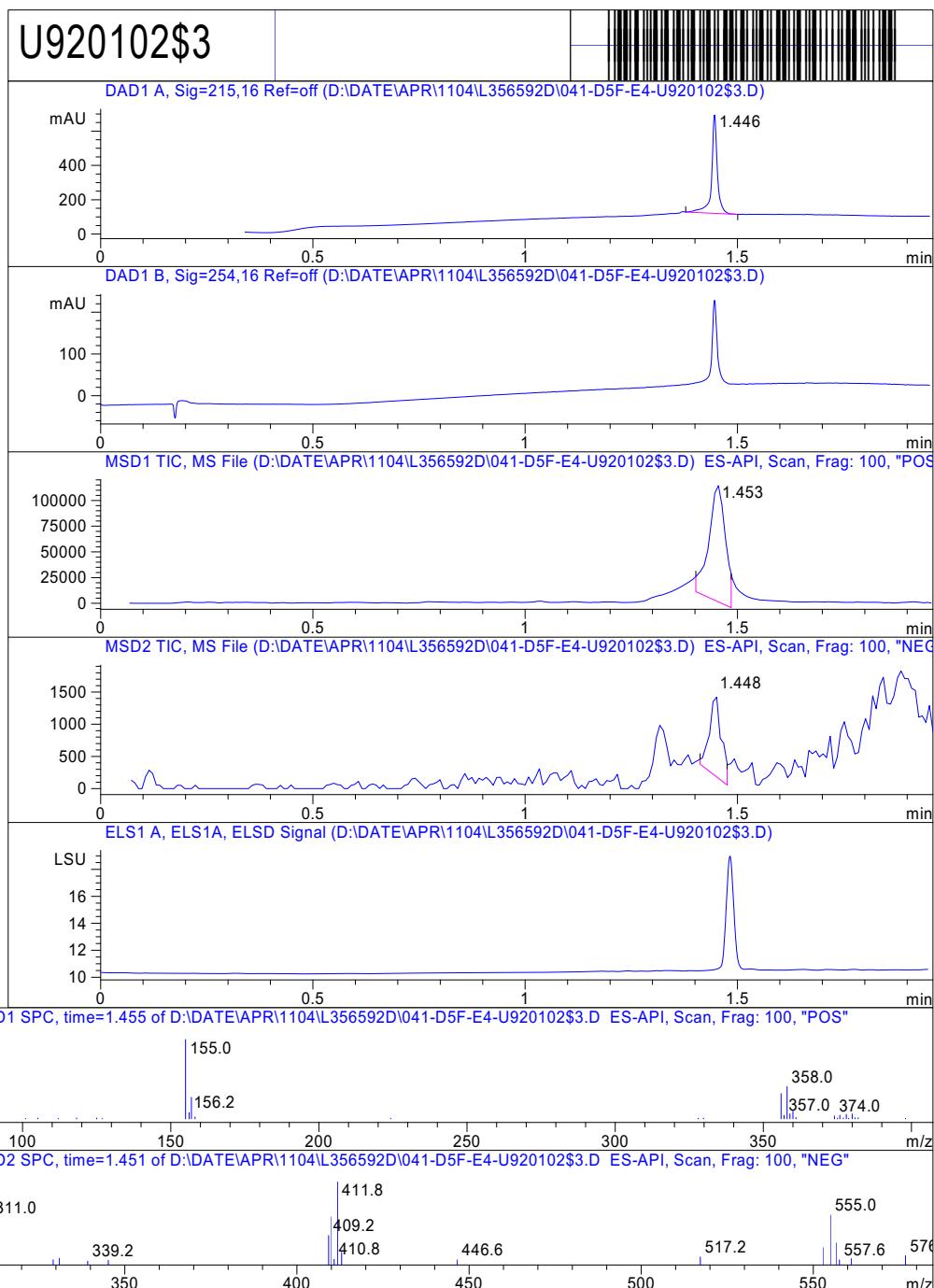
Z4954569120_

MaxPeak: 100.00%
Ret_Time: 1.446 min



Mol Wt 356.6
Exact Mass 356.97
Time Area%

1 1.446 100.00



Inj.Date 4/11/2021

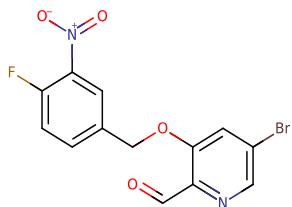
Y

- 14 -

Acq. Method C:\Chem32\ -> ->

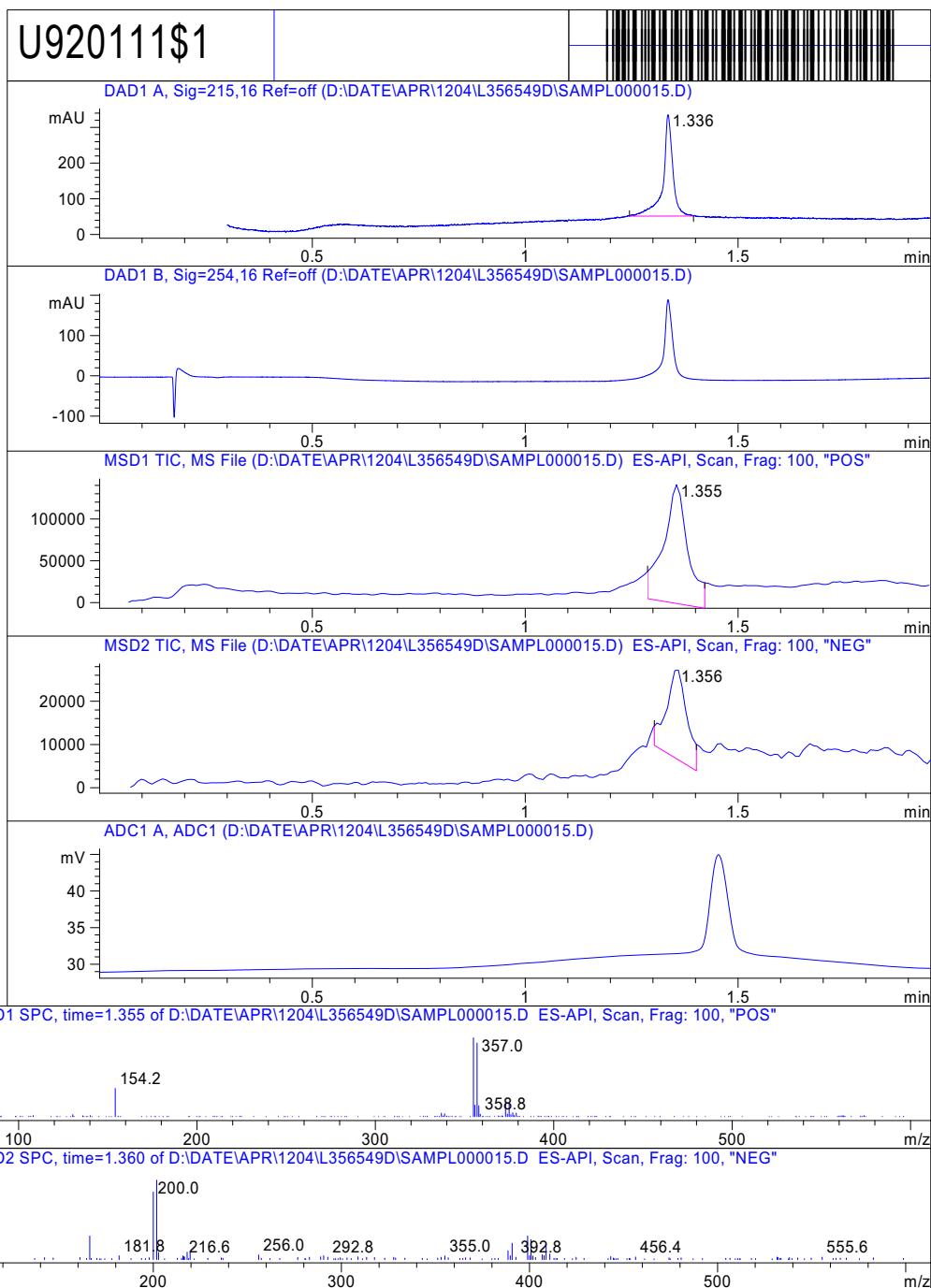
Z4954569125_

MaxPeak: 100.00%
Ret_Time: 1.336 min



Mol Wt 355.12
Exact Mass 353.96
Time Area%

1 1.336 100.00



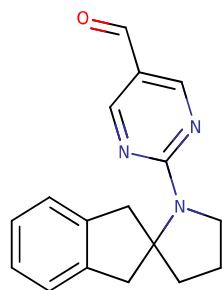
Inj.Date 4/11/2021

Y

- 4 - Acq. Method C:\CHEM32\ -> ->

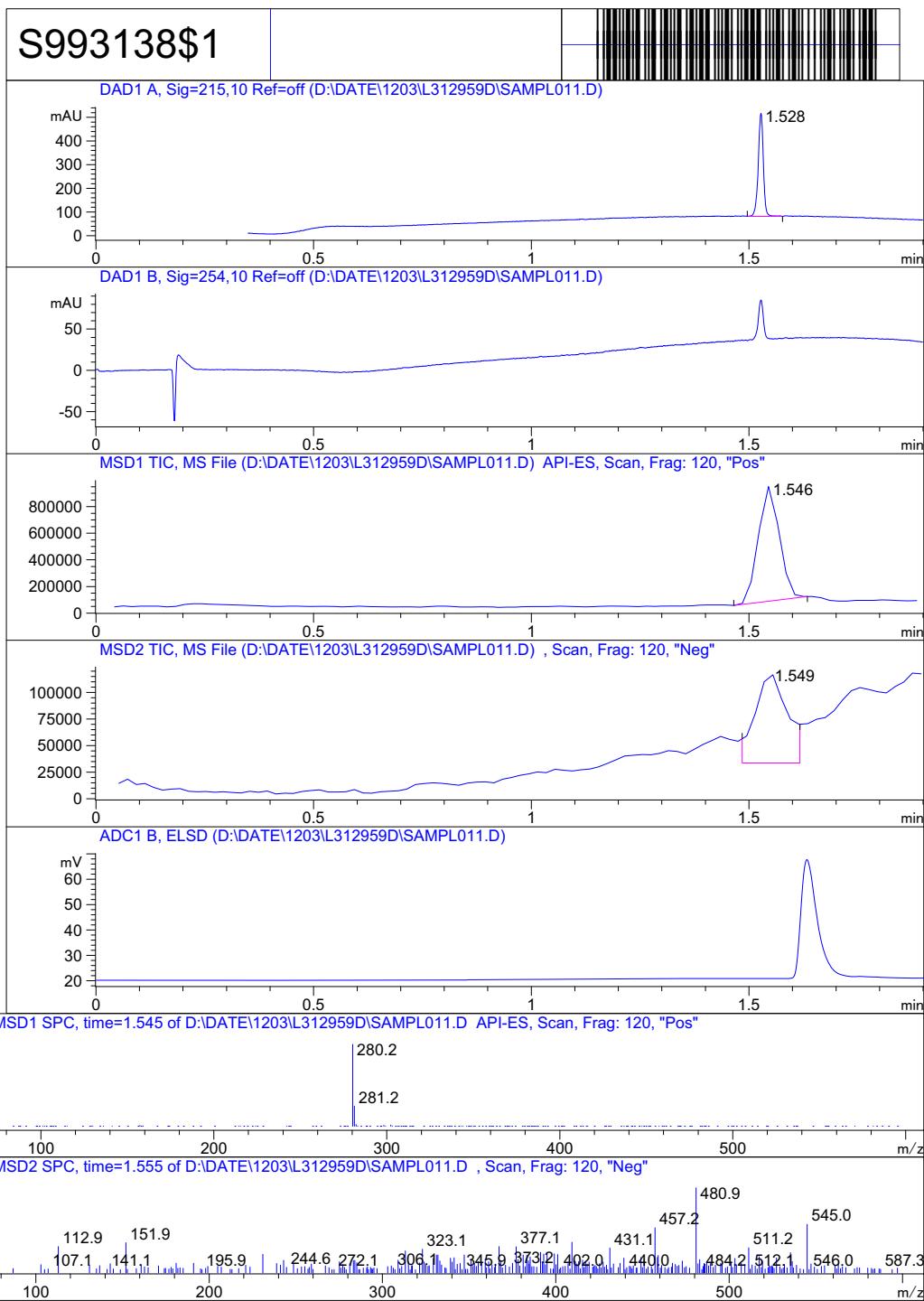
Z4954569219_

MaxPeak: 100.00%
Ret_Time: 1.528 min



Mol Wt 279.34
Exact Mass 279.16

#	Time	Area%
1	1.528	100.00



Inj.Date 12/3/2020

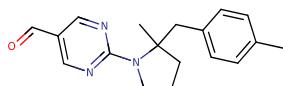
O

-SL-

Acq. Method C:\HPCHEM\-> ->

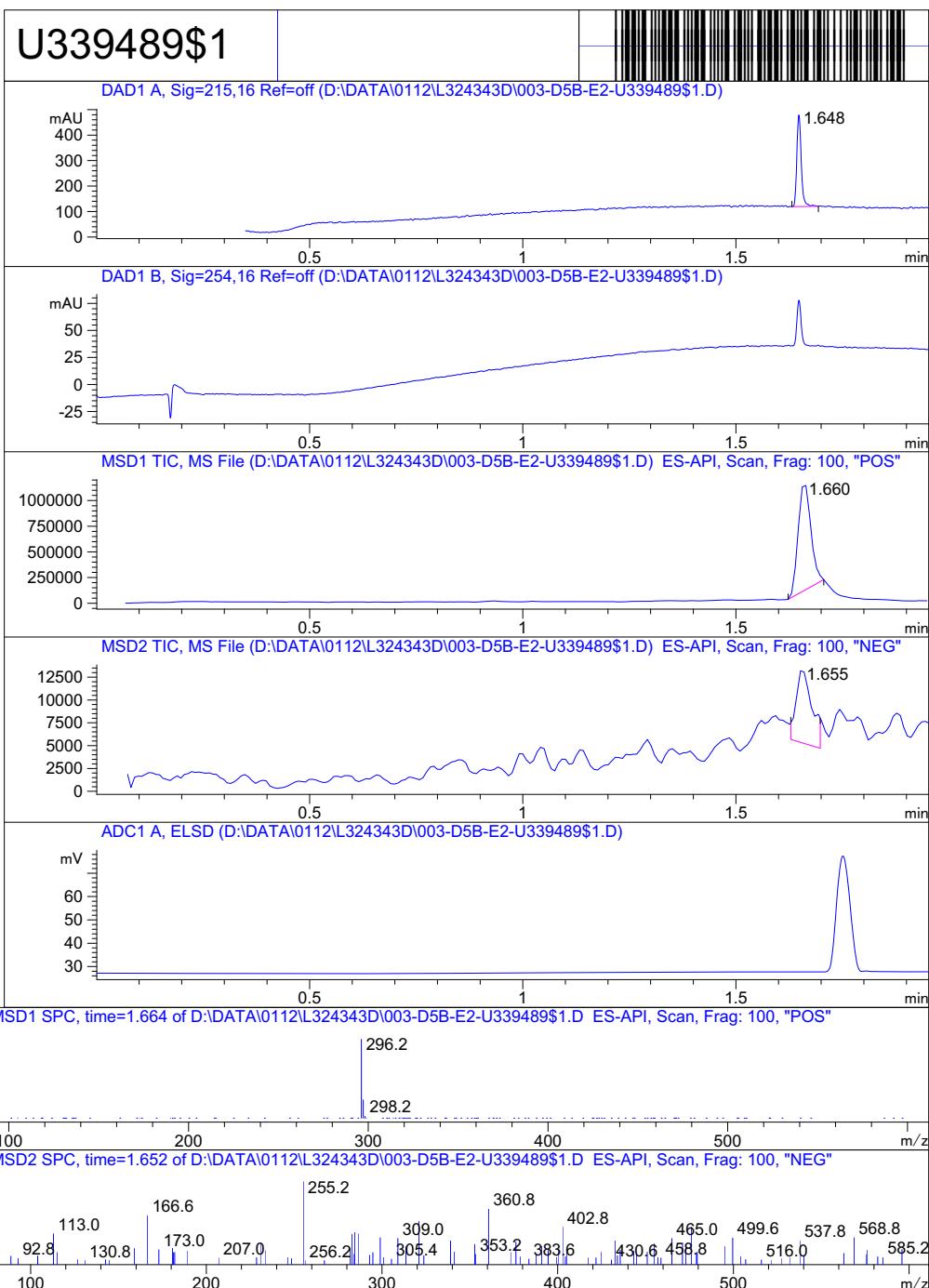
Z2851996828_

MaxPeak: 100.00%
Ret_Time: 1.648 min



Mol Wt 295.38
Exact Mass 295.2
Time Area%

1 1.648 100.00



Inj.Date 1/11/2021

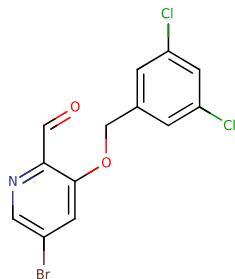
OA

-12-

Acq. Method C:\Chem32\-> ->

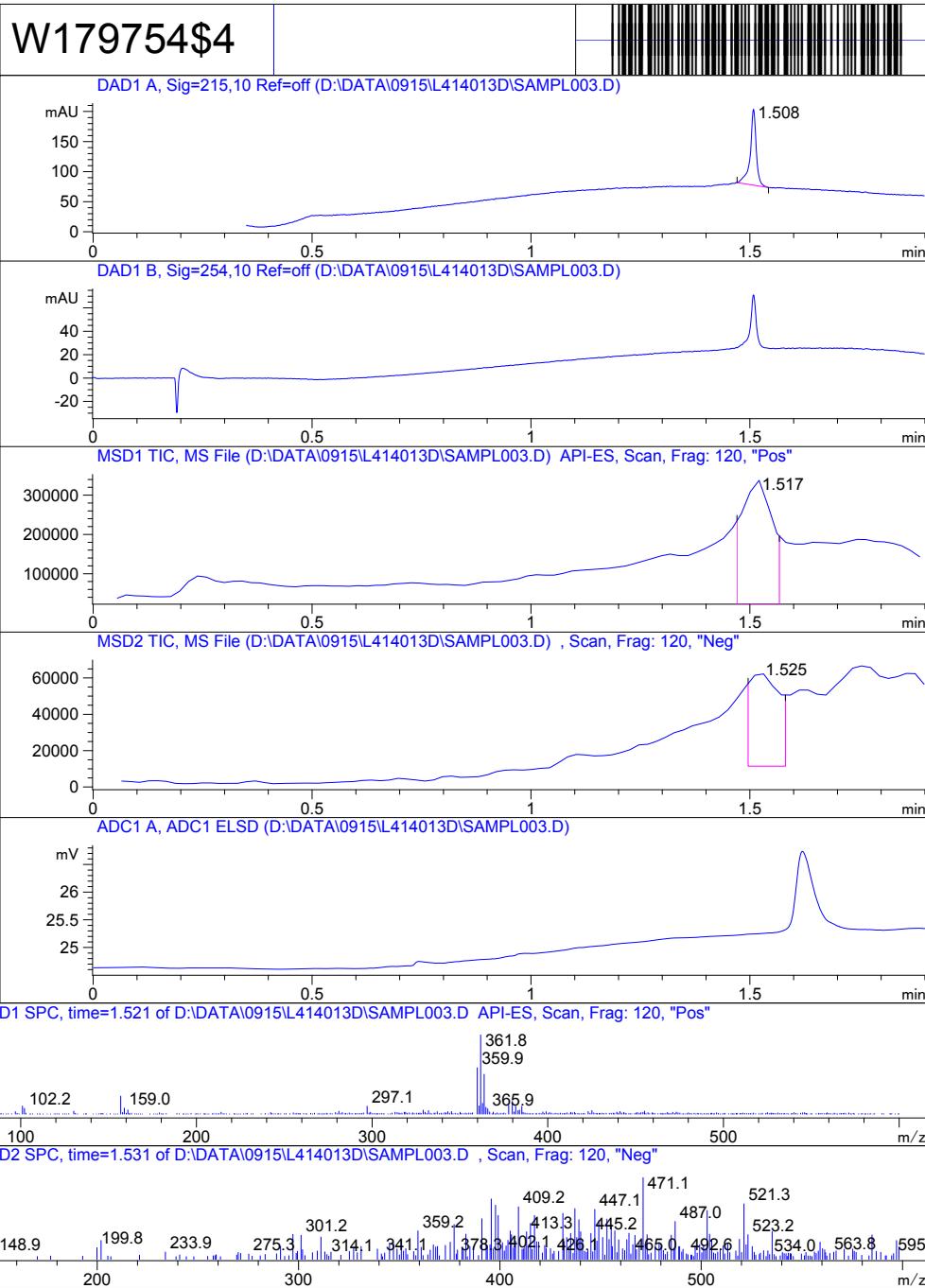
Z4658847374_

MaxPeak: 100.00%
Ret_Time: 1.508 min



Mol Wt 361.02
Exact Mass 360.92
Time Area%

1 1.508 100.00



Inj.Date 9/16/2021

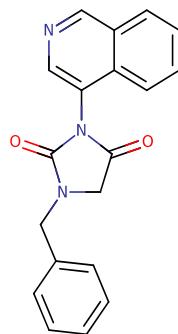
OA

-VL-

Acq. Method C:\HPCHEM\ -> ->

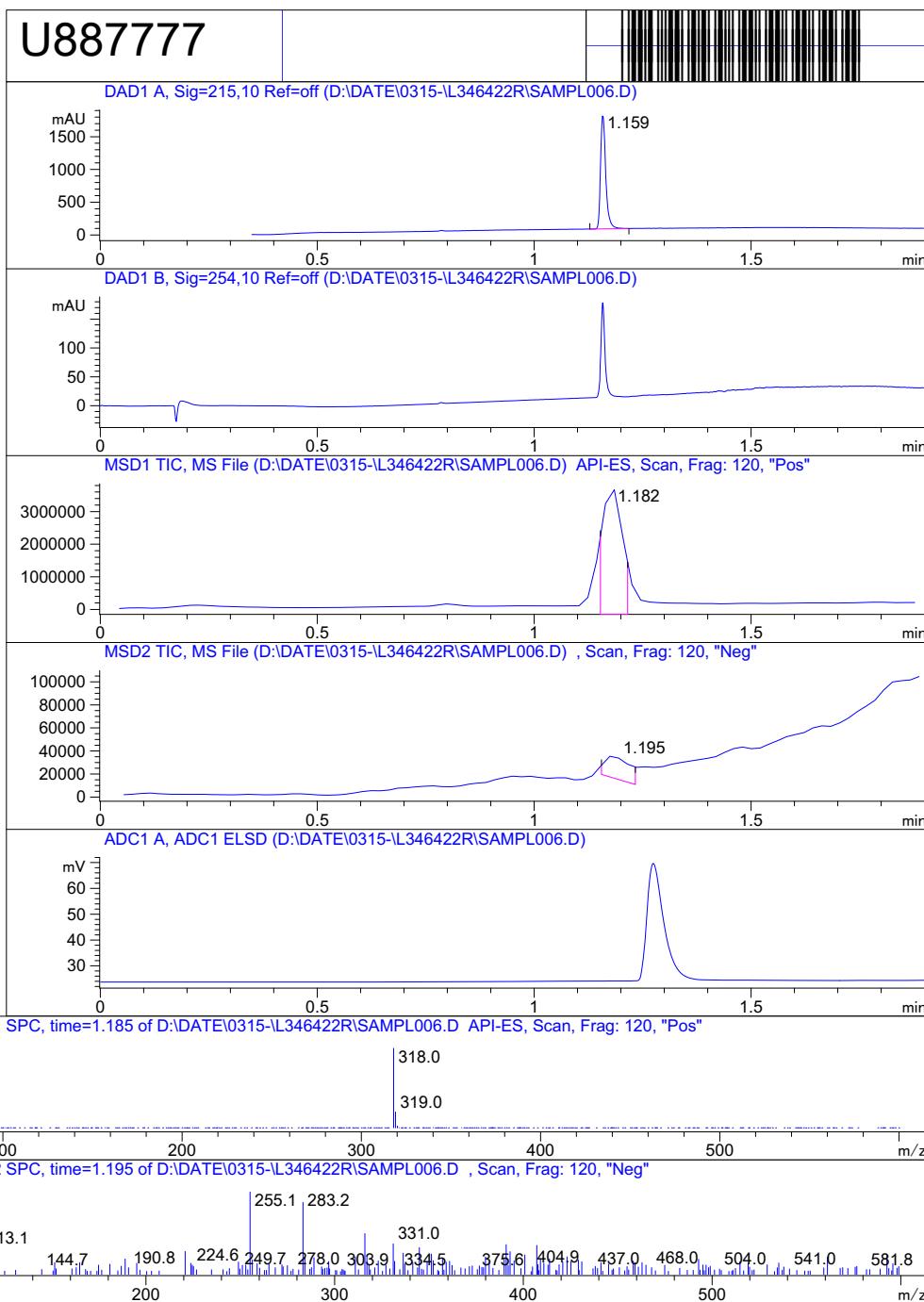
Z5192779033_

MaxPeak: 100.00%
Ret_Time: 1.159 min



Mol Wt 317.34
Exact Mass 317.13
Time Area%

1 1.159 100.00



Inj.Date 3/16/2021

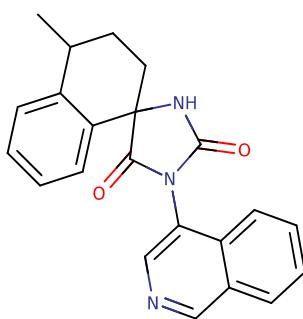
E

-VL-

Acq. Method C:\HPCHEM\-> ->

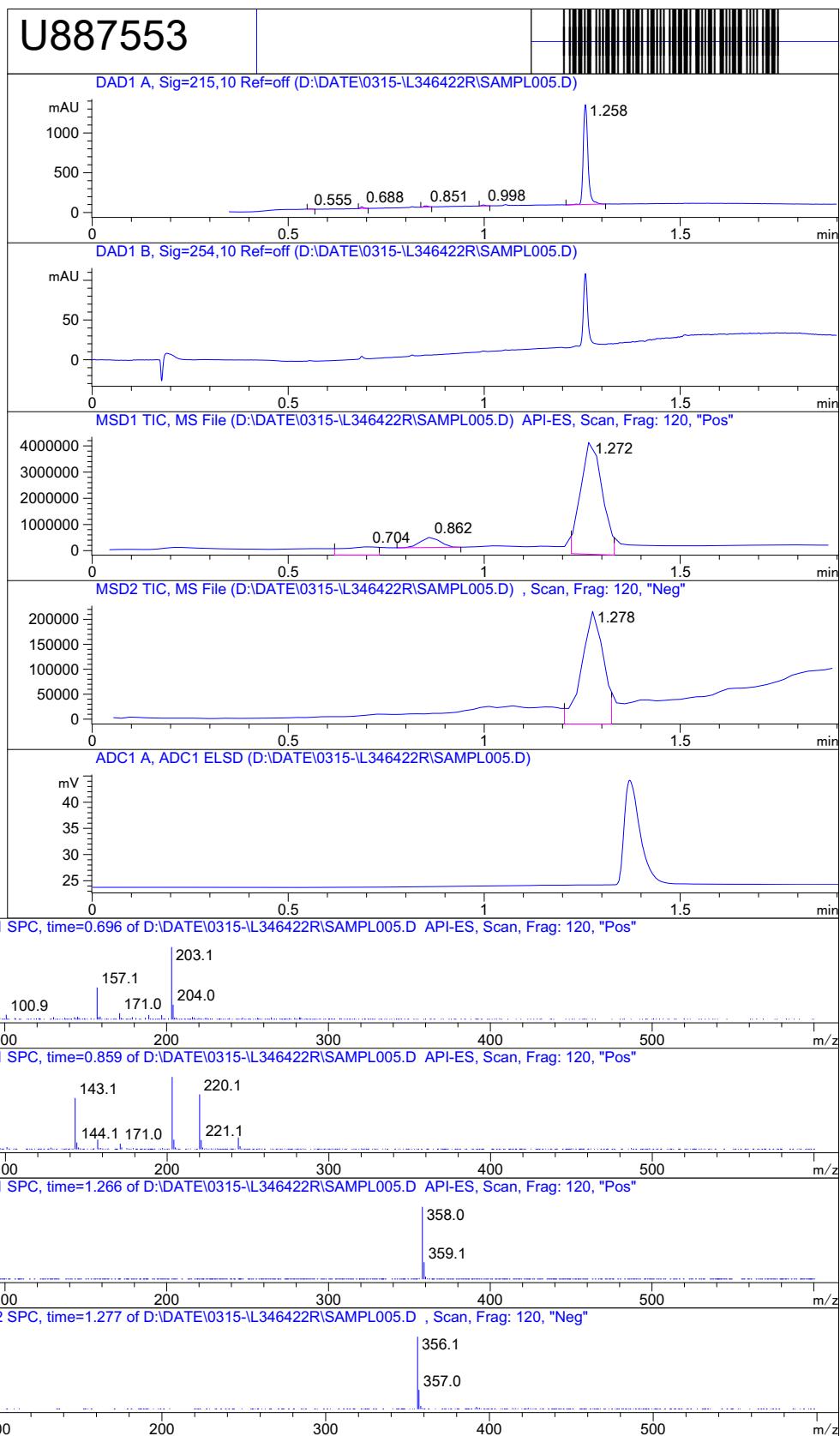
Z4929615903_

MaxPeak: 96.82%
Ret_Time: 1.258 min



Mol Wt 357.4
Exact Mass 357.17
Time Area%

1 0.555 0.19
2 0.688 1.05
3 0.851 1.12
4 0.998 0.81
5 1.258 96.82



Inj.Date 3/16/2021

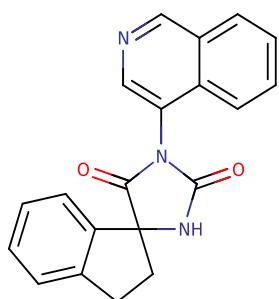
E

-VL-

Acq. Method C:\HPCHEM\-> ->

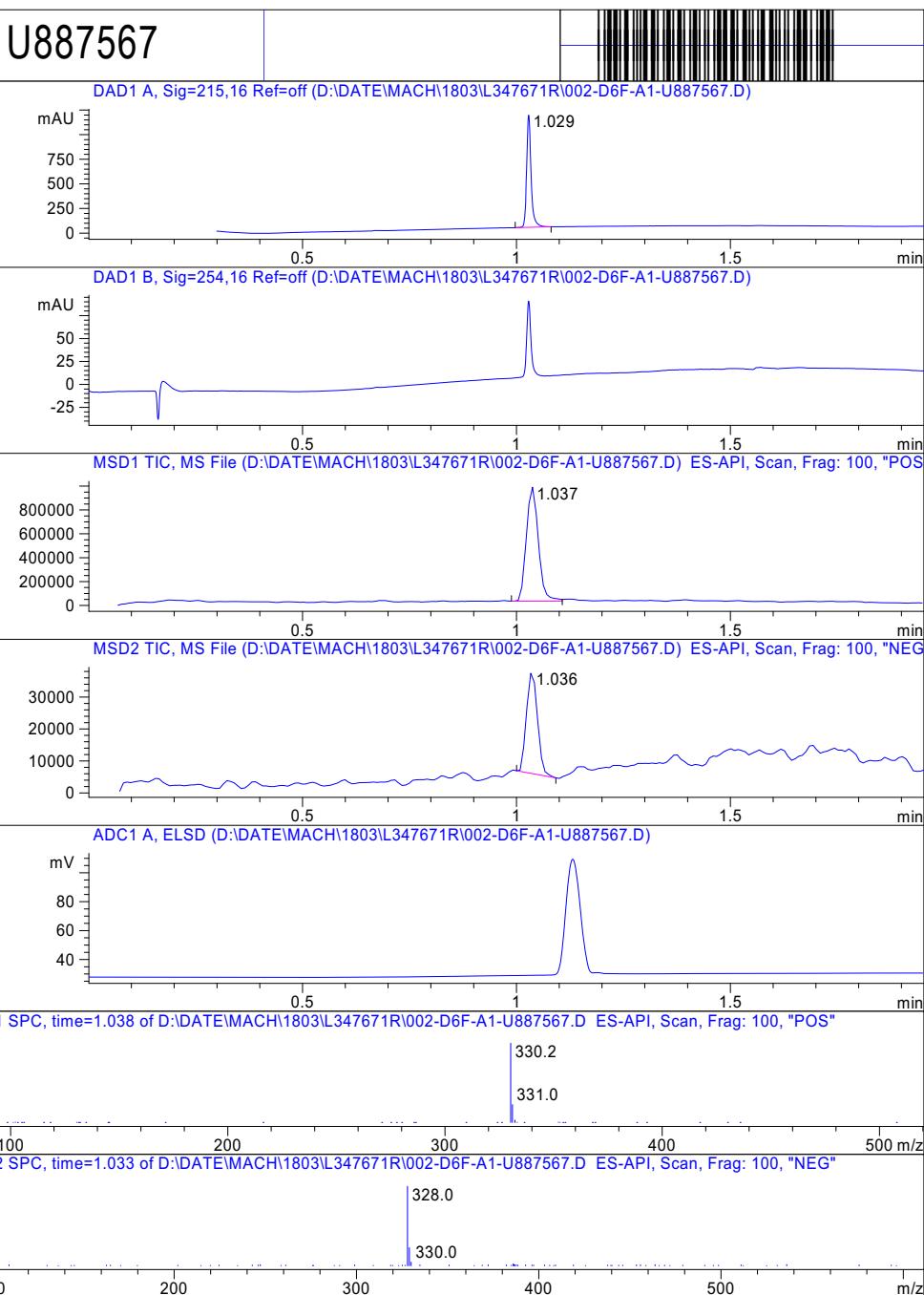
Z4929616137_

MaxPeak: 100.00%
Ret_Time: 1.029 min



Mol Wt 329.35
Exact Mass 329.13
Time Area%

1 1.029 100.00



Inj.Date 3/17/2021

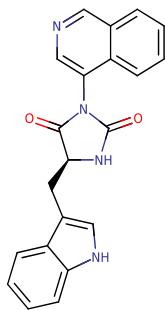
Y

- 8 -

Acq. Method C:\Chem32\ -> ->

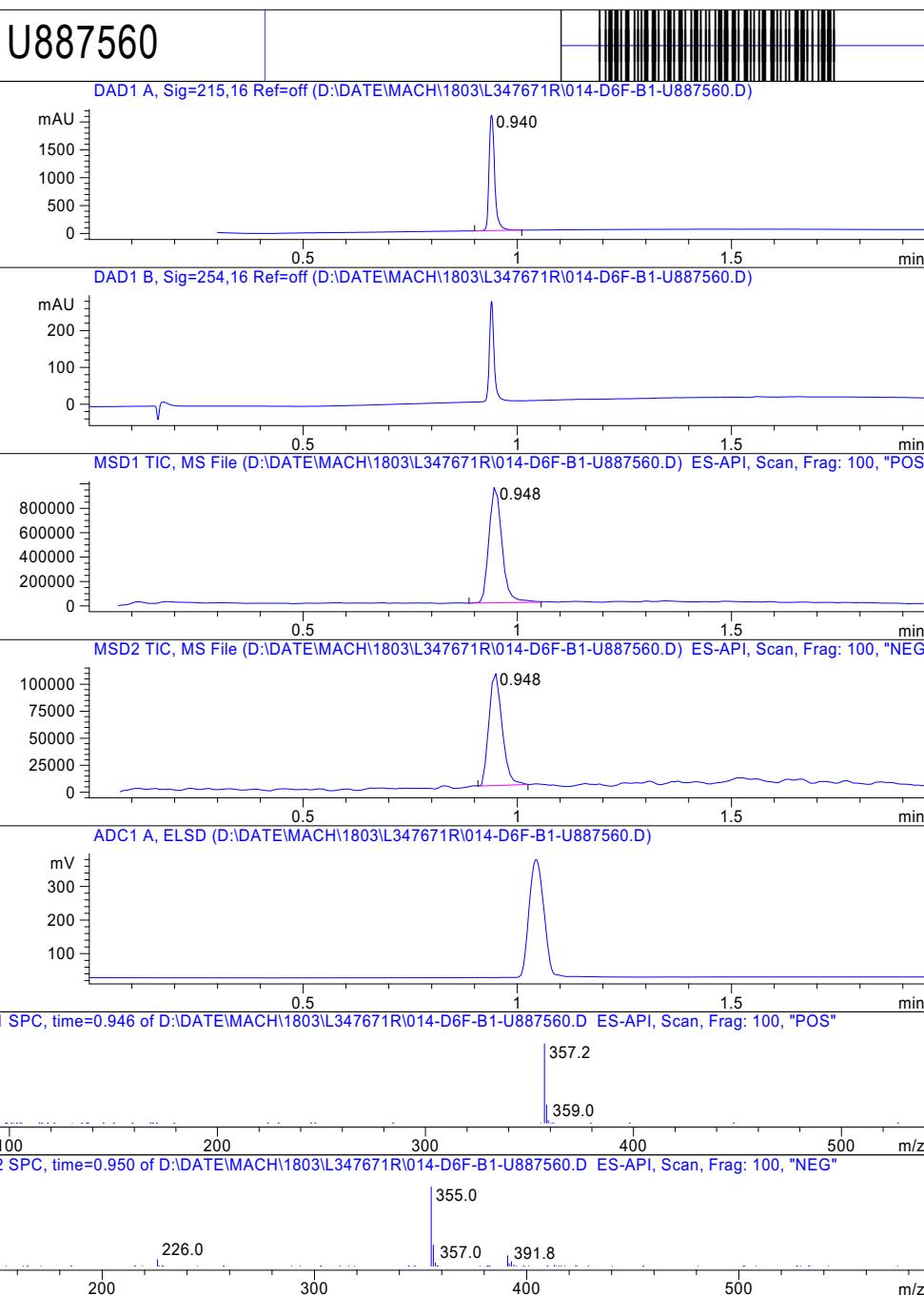
Z4929616111_

MaxPeak: 100.00%
Ret_Time: 0.940 min

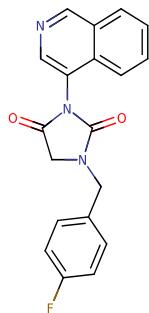


Mol Wt 356.38
Exact Mass 356.14
Time Area%

1 0.940 100.00

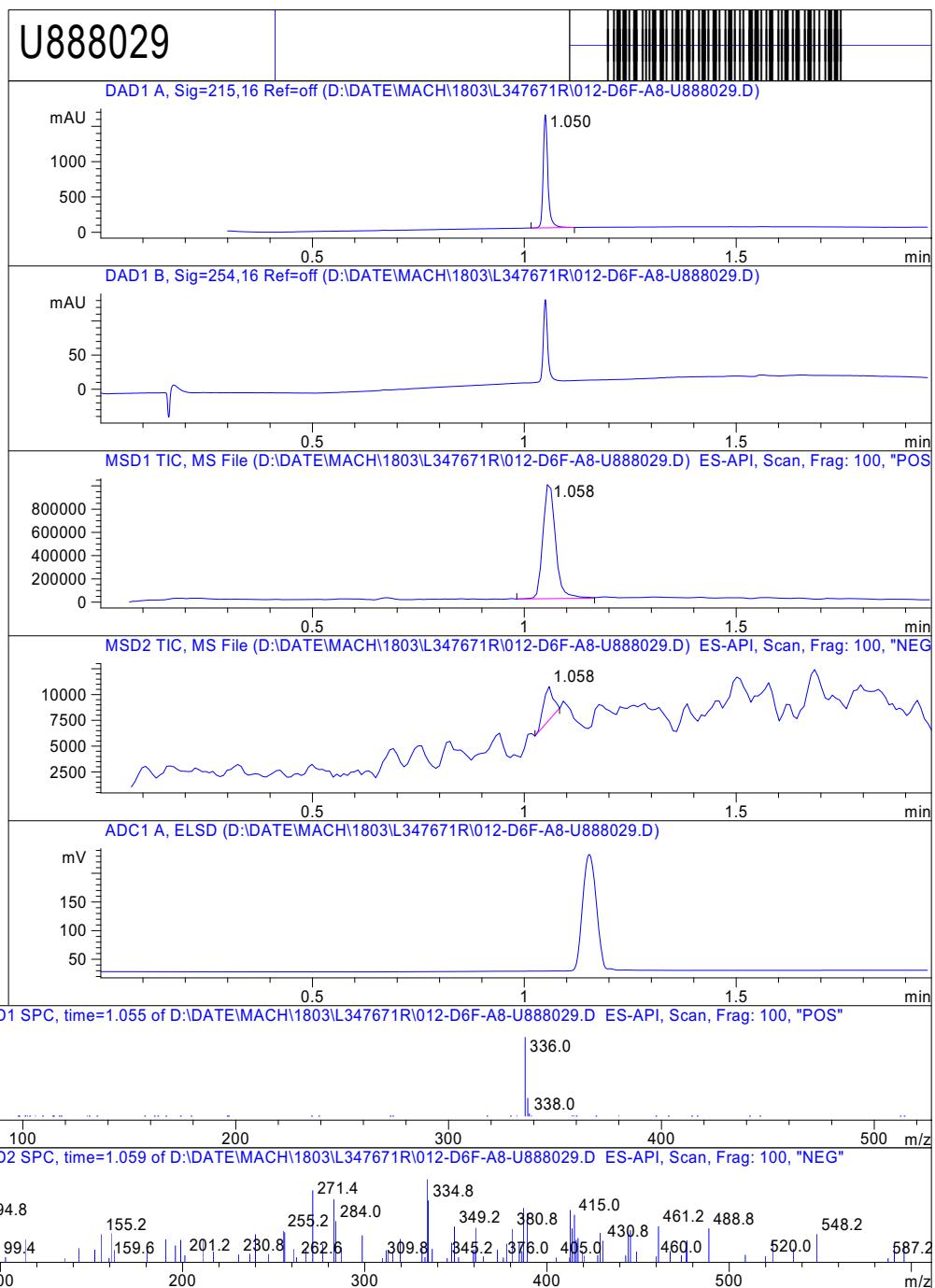


MaxPeak: 100.00%
Ret_Time: 1.050 min



Mol Wt 335.33
Exact Mass 335.12
Time Area%

1 1.050 100.00



Inj.Date 3/17/2021

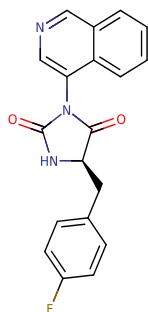
Y

- 8 -

Acq. Method C:\Chem32\ -> ->

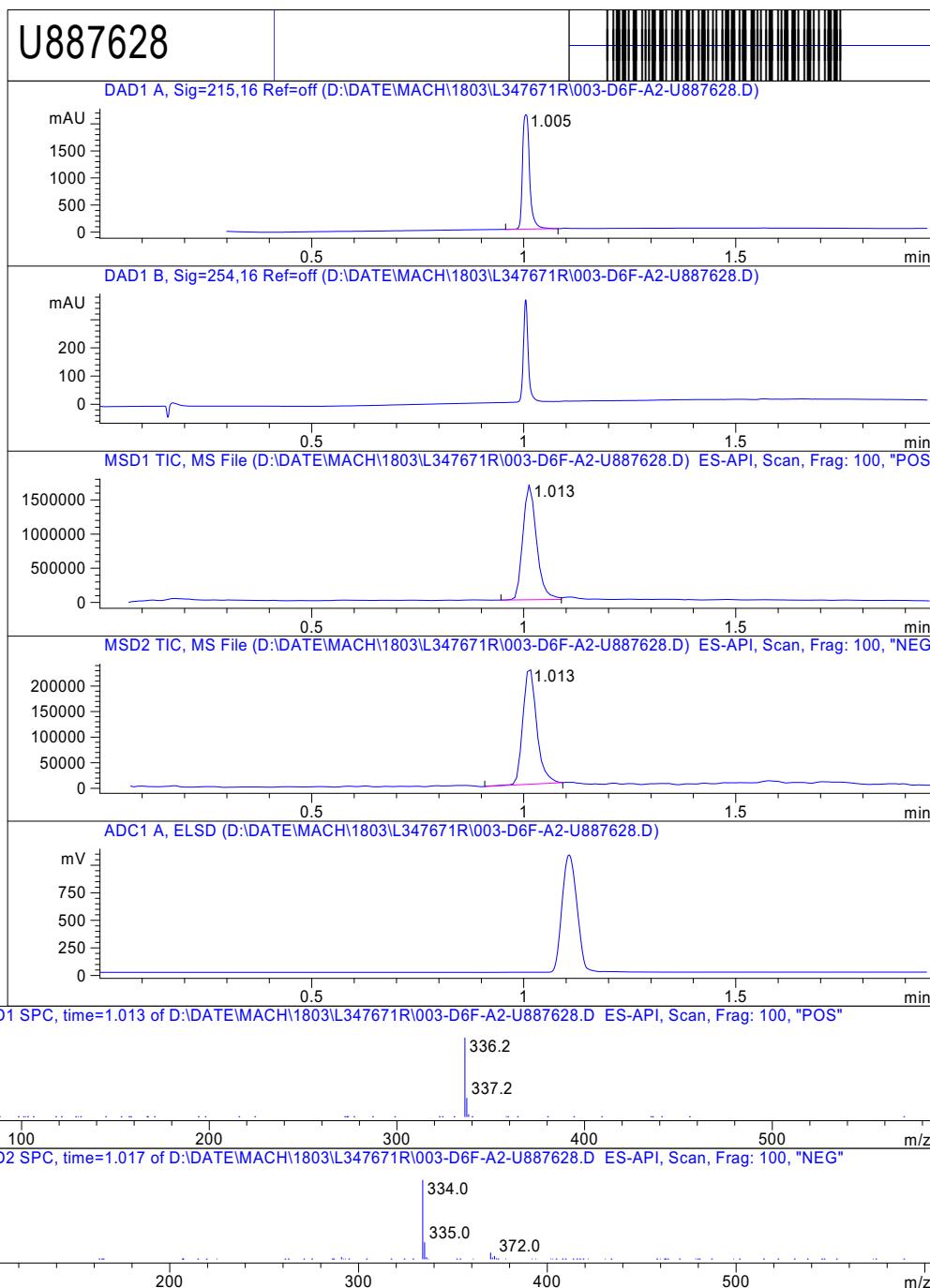
Z4929615548_

MaxPeak: 100.00%
Ret_Time: 1.005 min



Mol Wt 335.33
Exact Mass 335.12
Time Area%

1 1.005 100.00



Inj.Date 3/17/2021

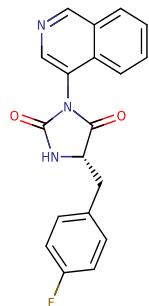
Y

- 8 -

Acq. Method C:\Chem32\ -> ->

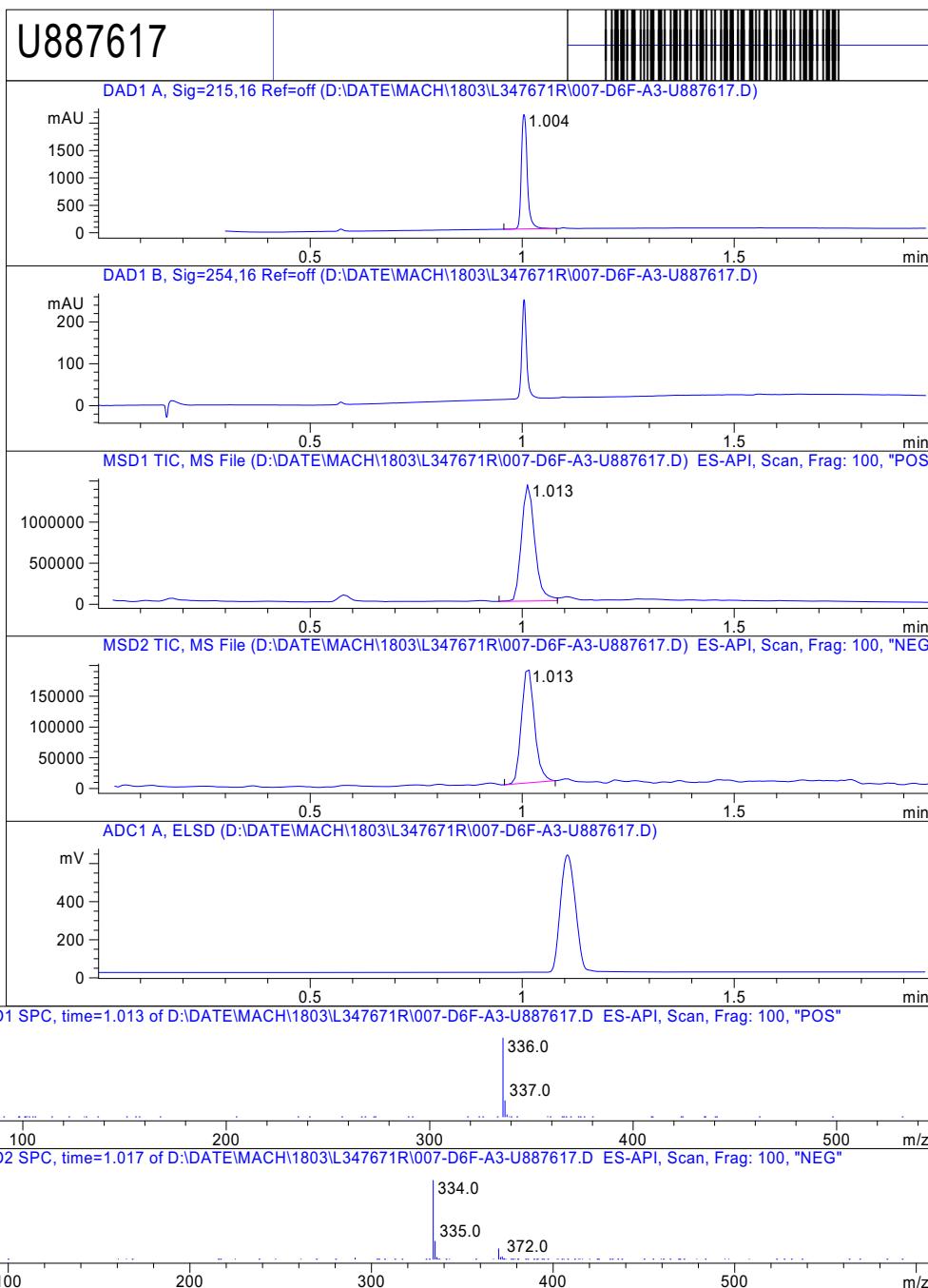
Z4929615788_

MaxPeak: 100.00%
Ret_Time: 1.004 min

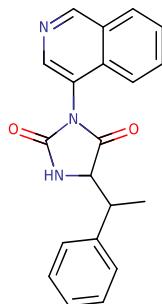


Mol Wt 335.33
Exact Mass 335.12
Time Area%

1 1.004 100.00

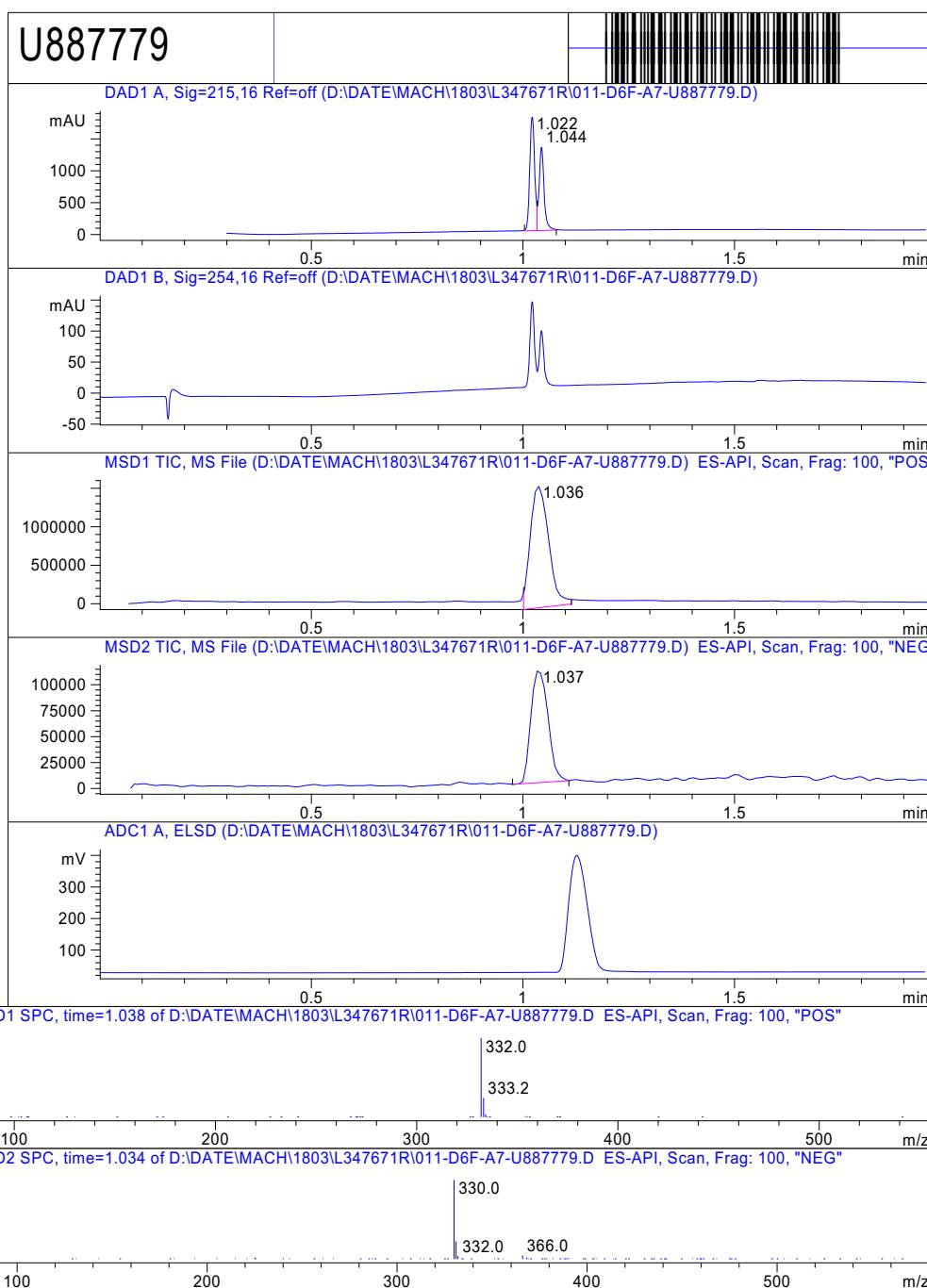


MaxPeak: 57.60%
Ret_Time: 1.022 min



Mol Wt 331.37
Exact Mass 331.15
Time Area%

1 1.022 57.60
2 1.044 42.40

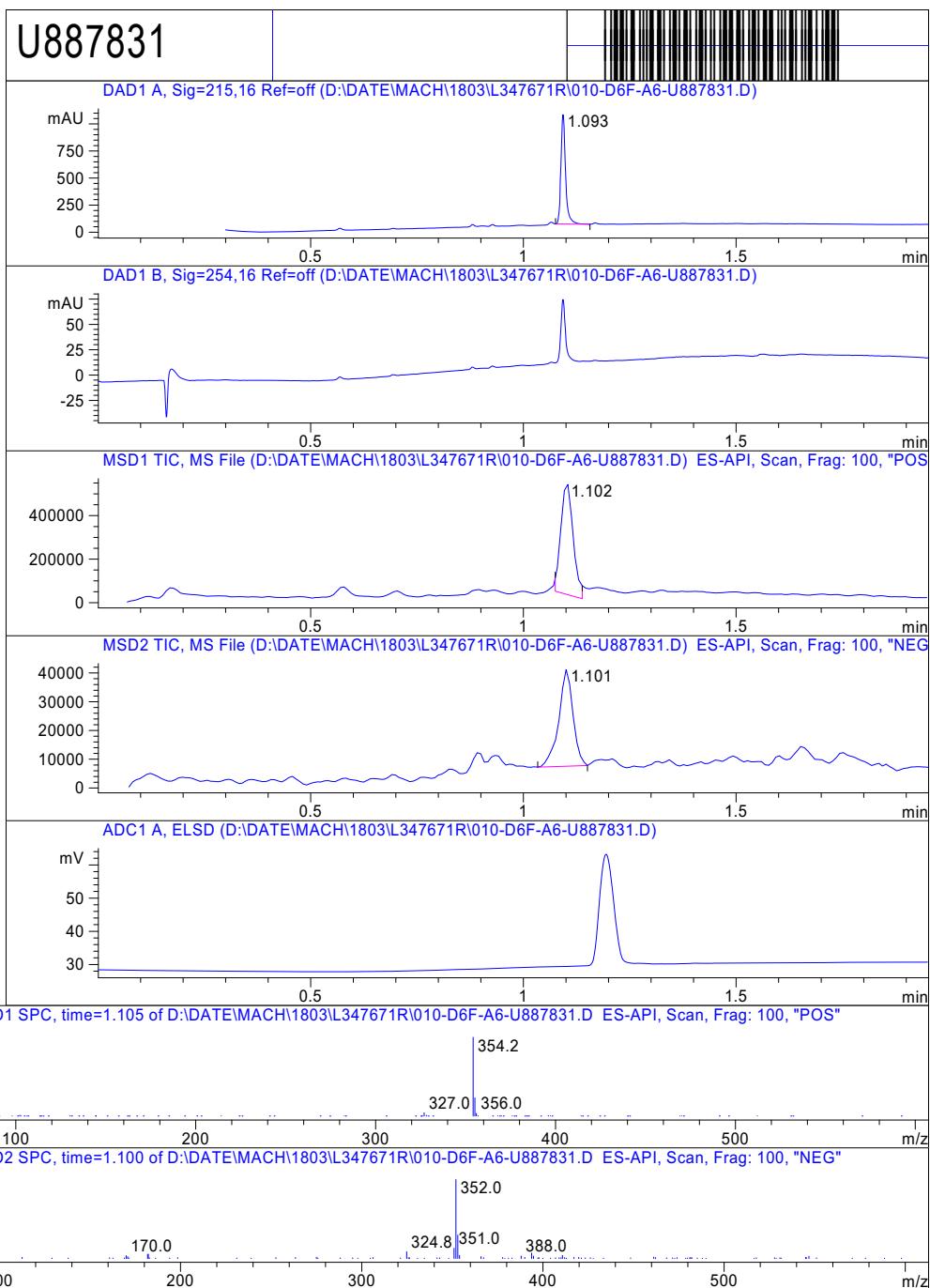


MaxPeak: 100.00%
Ret_Time: 1.093 min

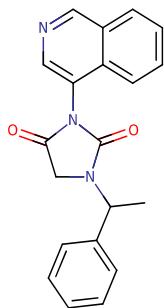


Mol Wt 353.37
Exact Mass 353.13
Time Area%

1 1.093 100.00

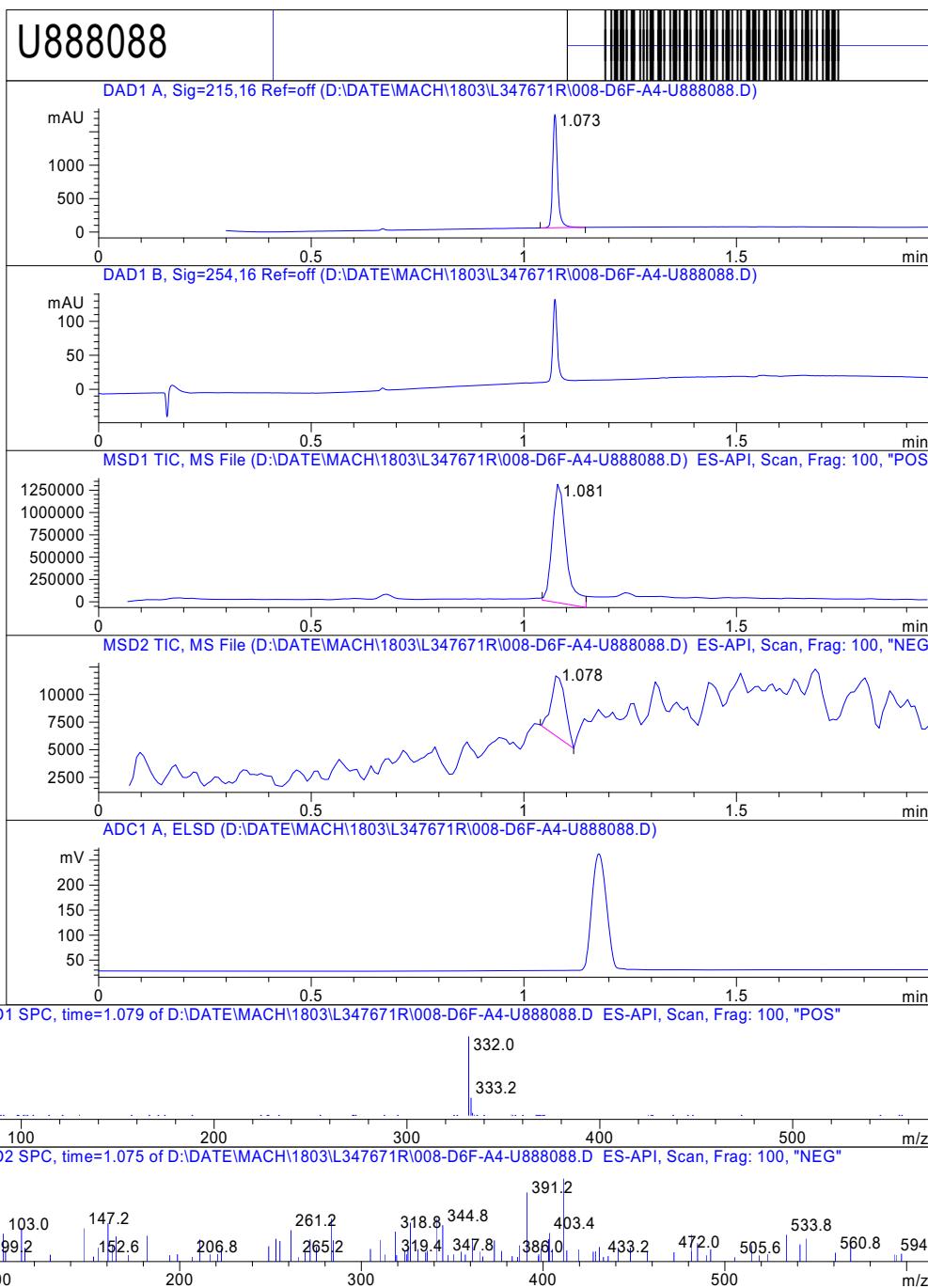


MaxPeak: 100.00%
Ret_Time: 1.073 min



Mol Wt 331.37
Exact Mass 331.15
Time Area%

1 1.073 100.00



Inj.Date 3/17/2021

Y

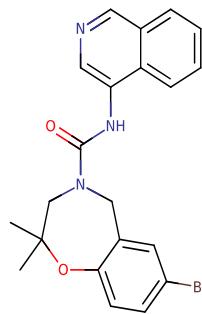
- 8 -

Acq. Method C:\Chem32\ ->

->

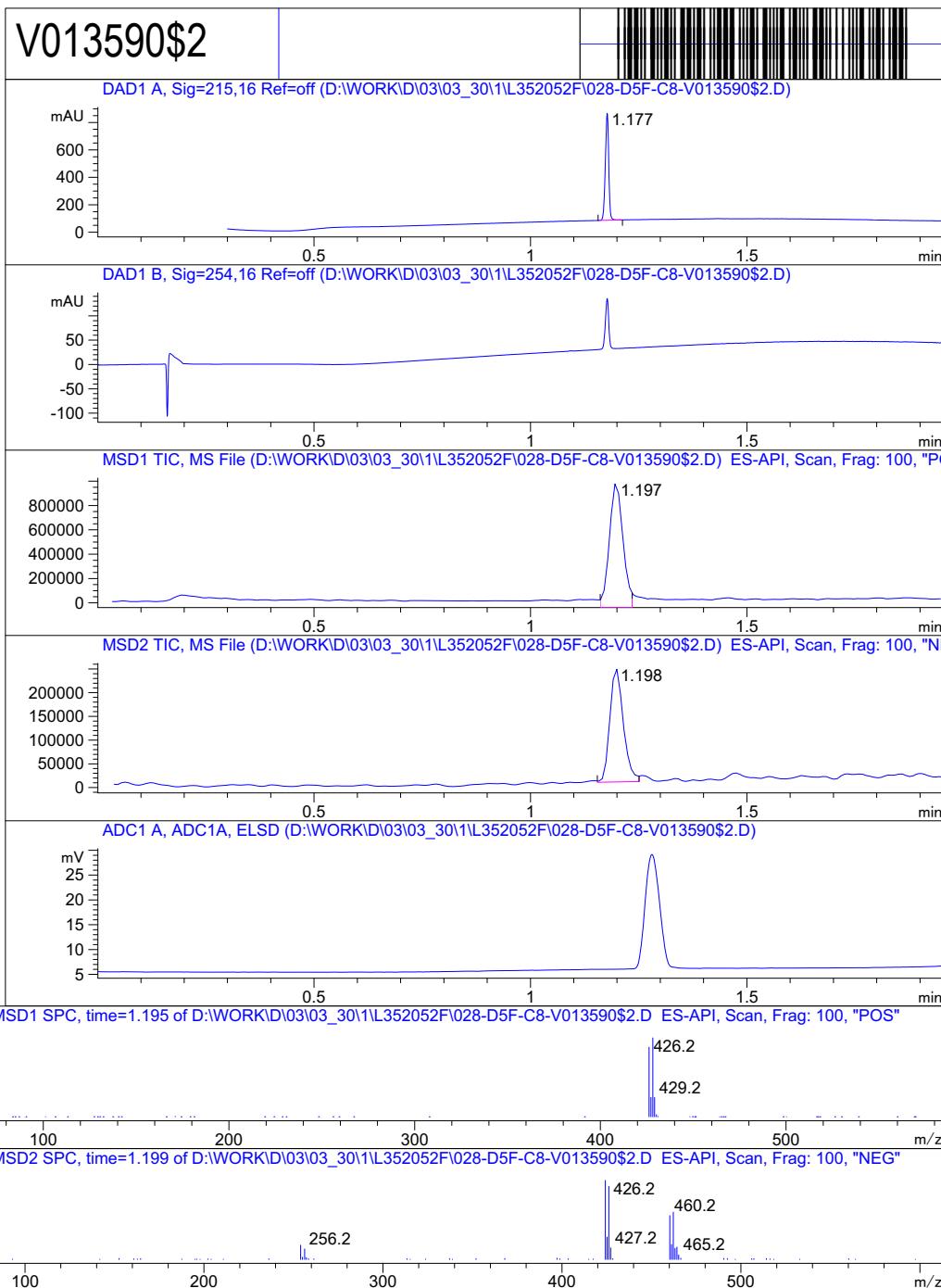
Z4925123498_

MaxPeak: 100.00%
Ret_Time: 1.177 min



Mol Wt 426.31
Exact Mass 427.1

#	Time	Area%
1	1.177	100.00



Inj.Date 3/30/2021

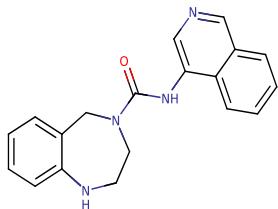
K

-25-

Acq. Method C:\Users\ -> ->

Z4924562413_

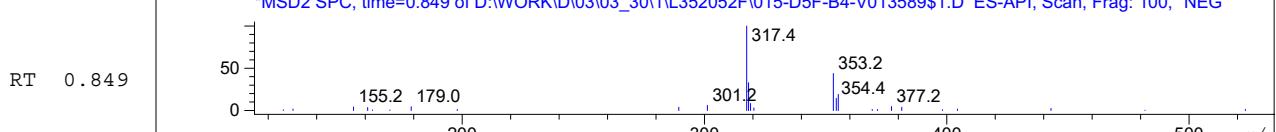
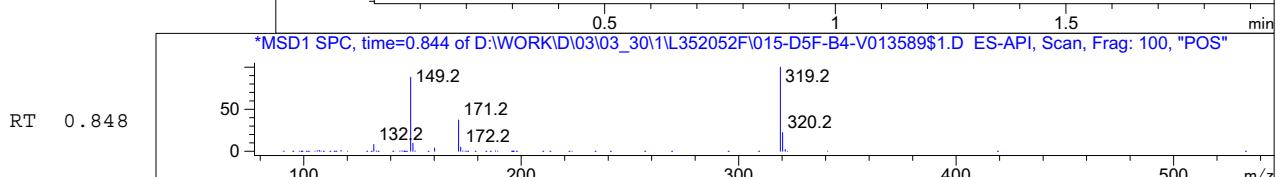
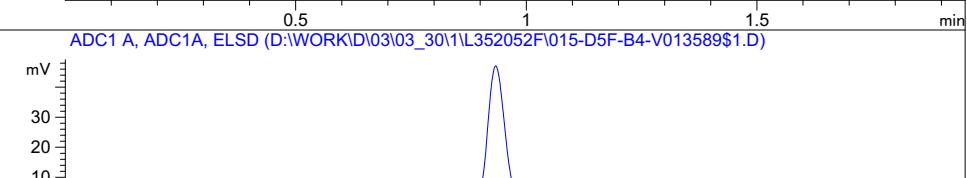
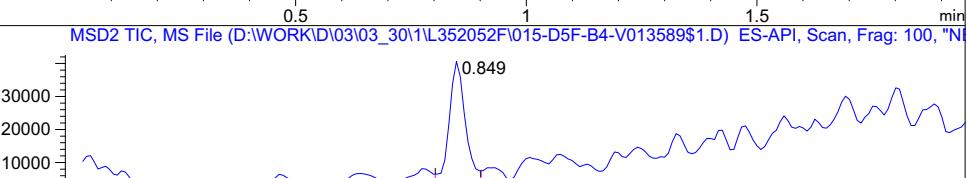
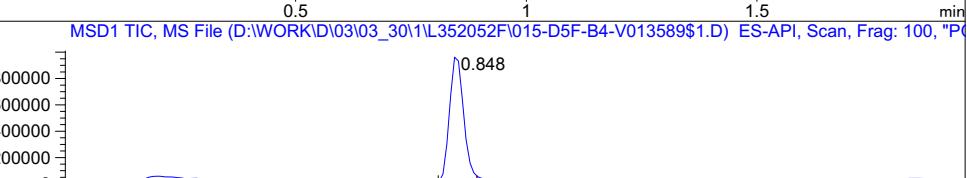
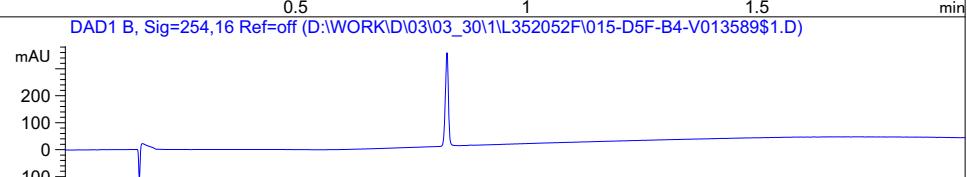
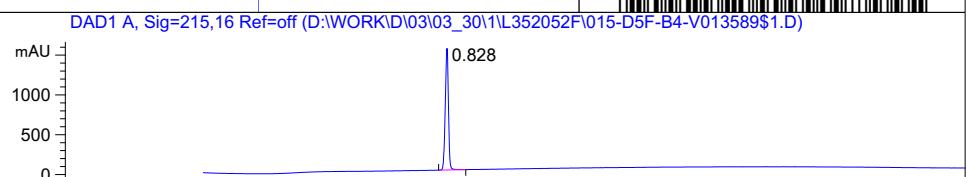
MaxPeak: 100.00%
Ret_Time: 0.828 min



Mol Wt 318.37
Exact Mass 318.17
Time Area%

1 0.828 100.00

V013589\$1



Inj.Date 3/30/2021

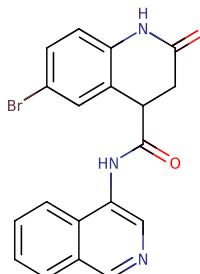
K

-25-

Acq. Method C:\Users\ -> ->

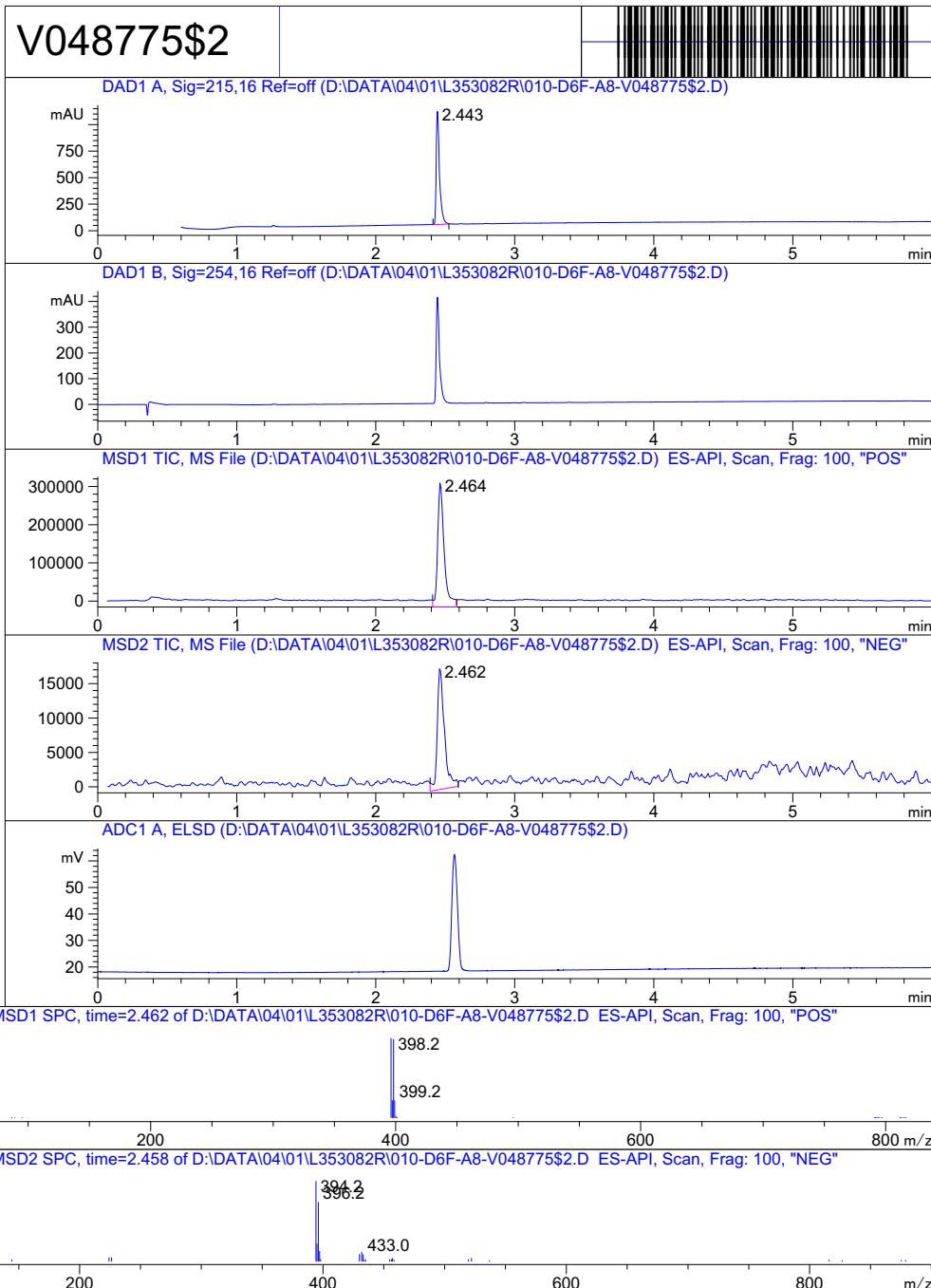
Z4924562415_

MaxPeak: 100.00%
Ret_Time: 2.443 min



Mol Wt 396.24
Exact Mass 395.04
Time Area%

1 2.443 100.00



Inj.Date 4/1/2021

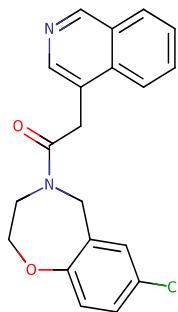
LB

-9-

Acq. Method C:\Chem32\-> ->

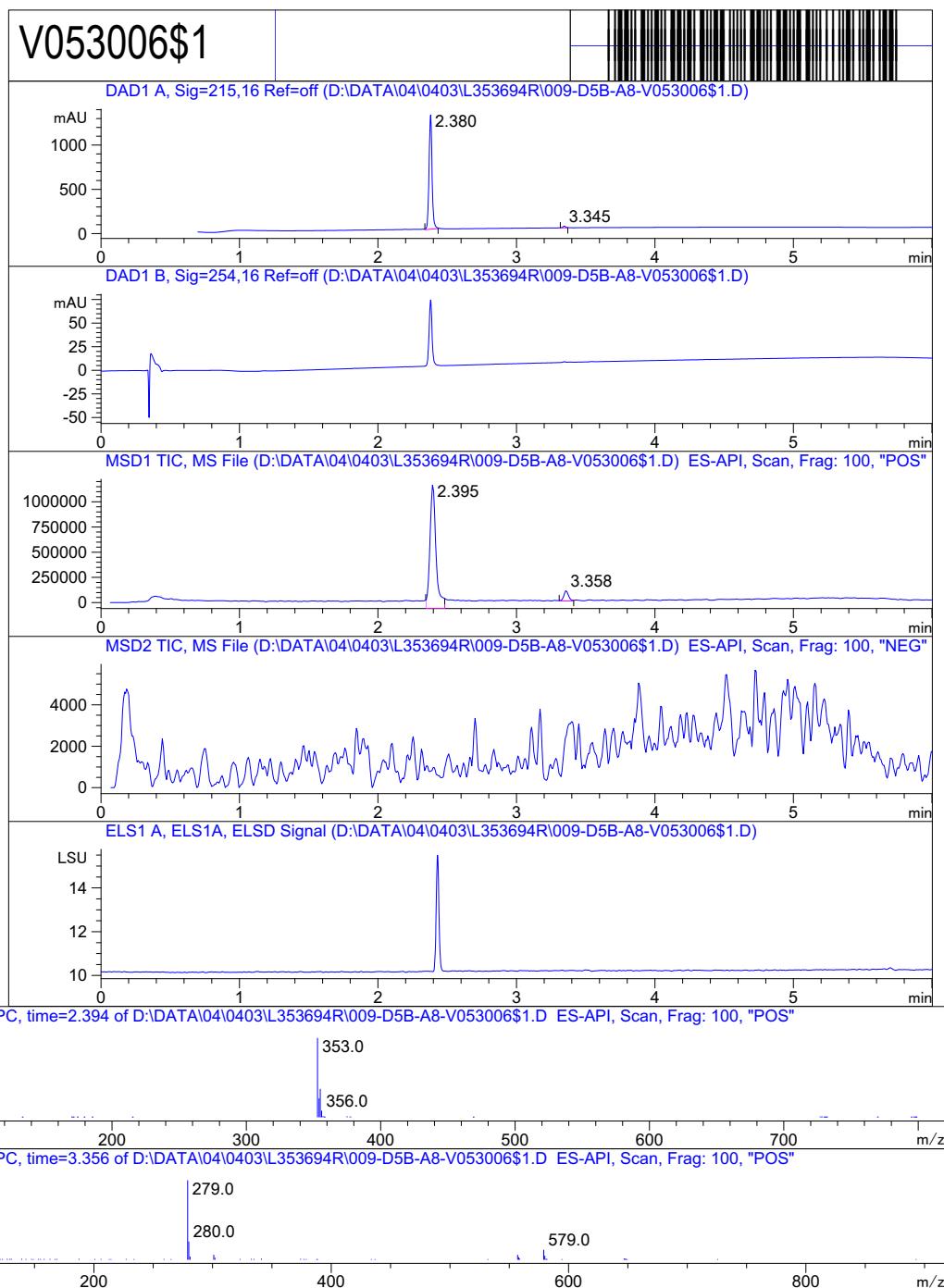
Z1892658668_

MaxPeak: 98.67%
Ret_Time: 2.380 min



Mol Wt 352.81
Exact Mass 352.12
Time Area%

1 2.380 98.67
2 3.345 1.33



Inj.Date 4/2/2021

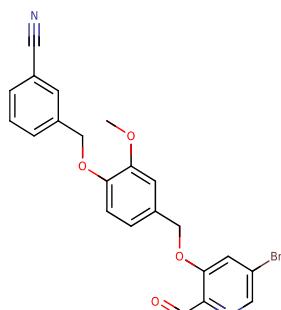
LT

-15-

Acq. Method C:\Chem32\ -> ->

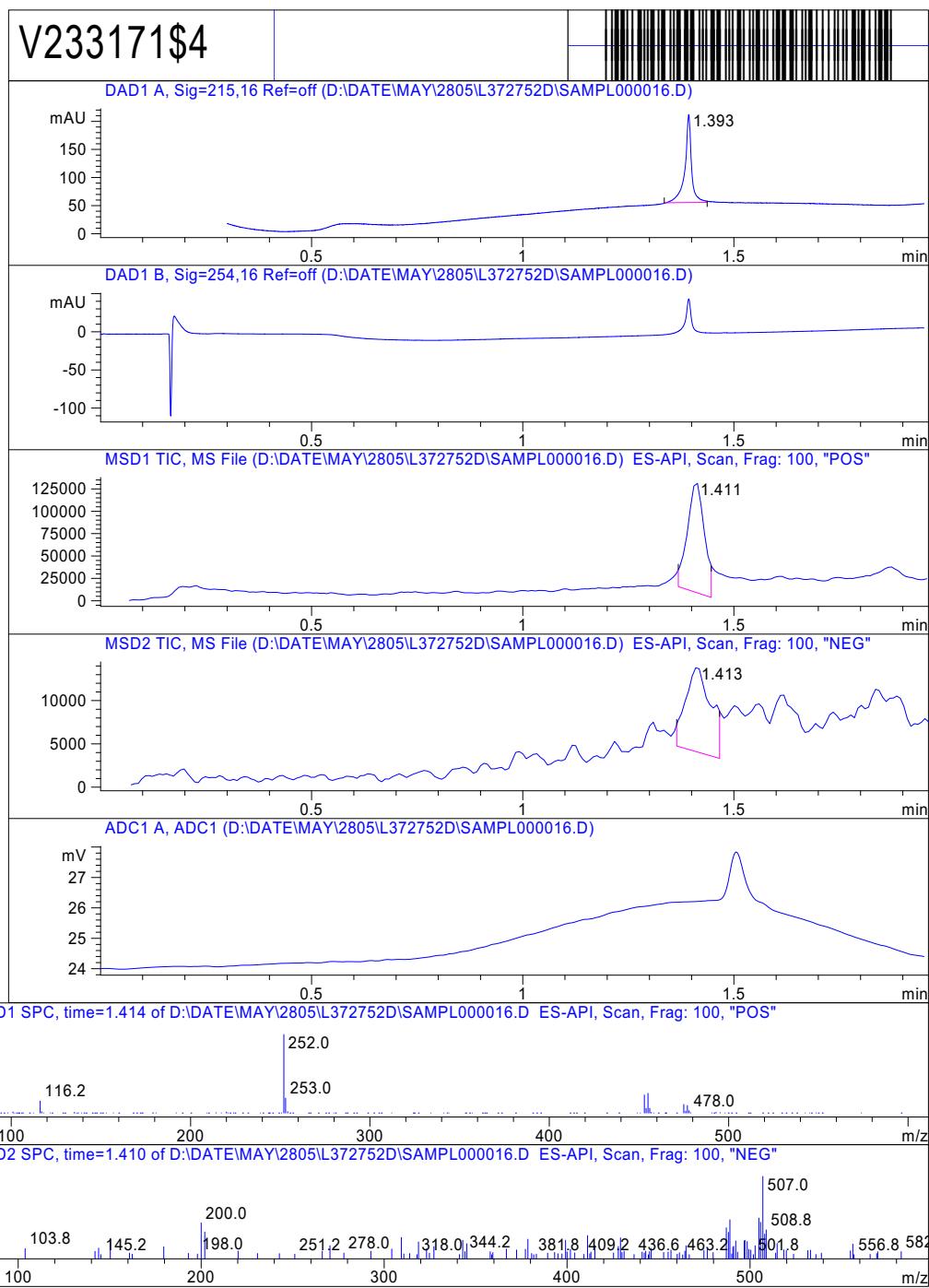
Z4946671001_

MaxPeak: 100.00%
Ret_Time: 1.393 min

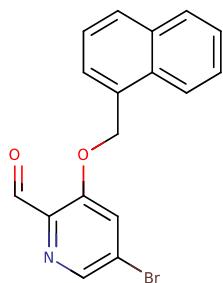


Mol Wt 453.28
Exact Mass 454.05

#	Time	Area%
1	1.393	100.00

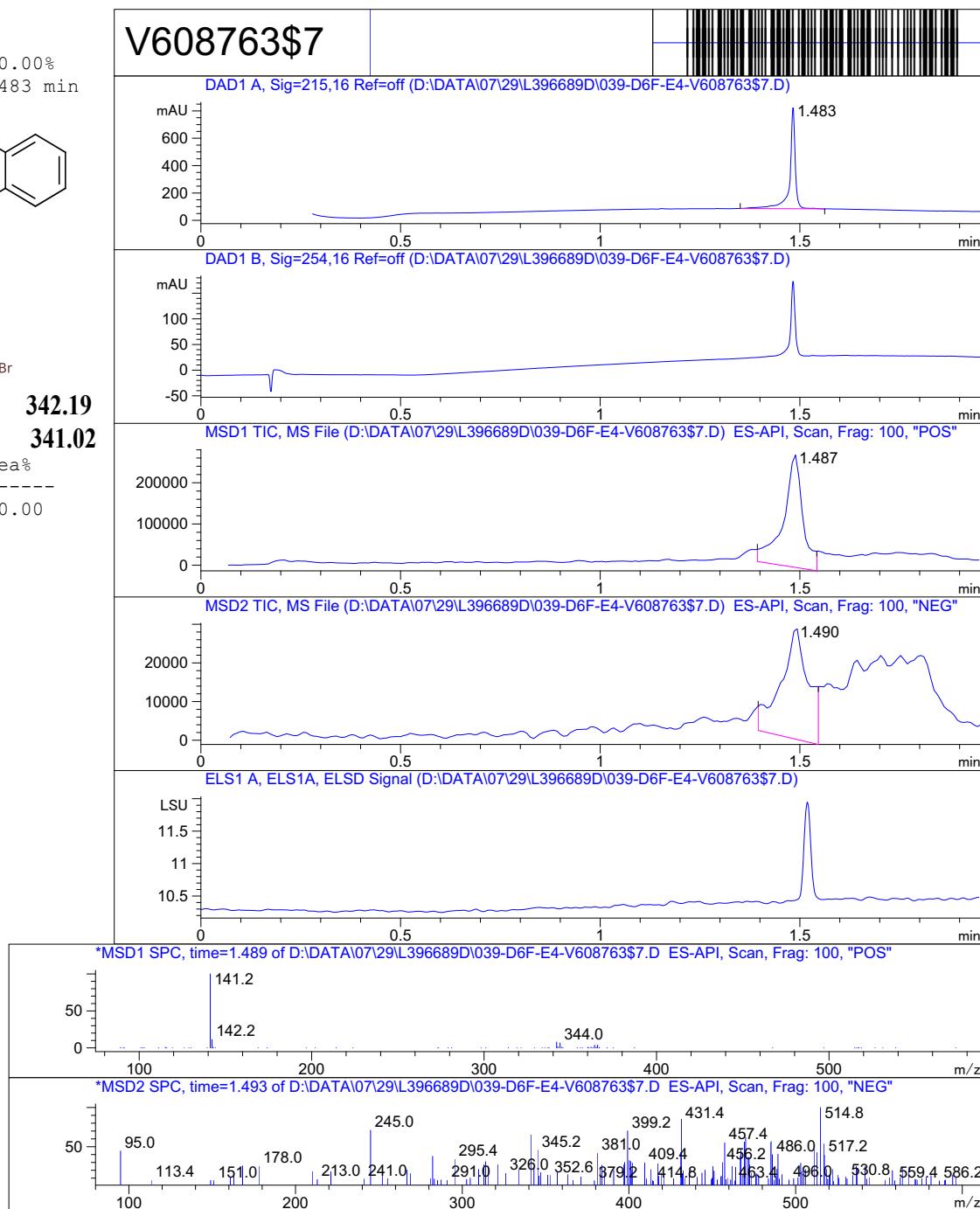


MaxPeak: 100.00%
Ret_Time: 1.483 min



Mol Wt 342.19
Exact Mass 341.02
Time Area%

1 1.483 100.00



Inj.Date 7/29/2021

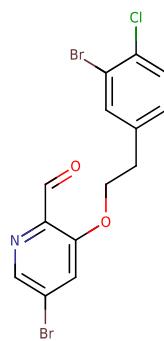
LB

-16-

Acq. Method C:\Chem32\-> ->

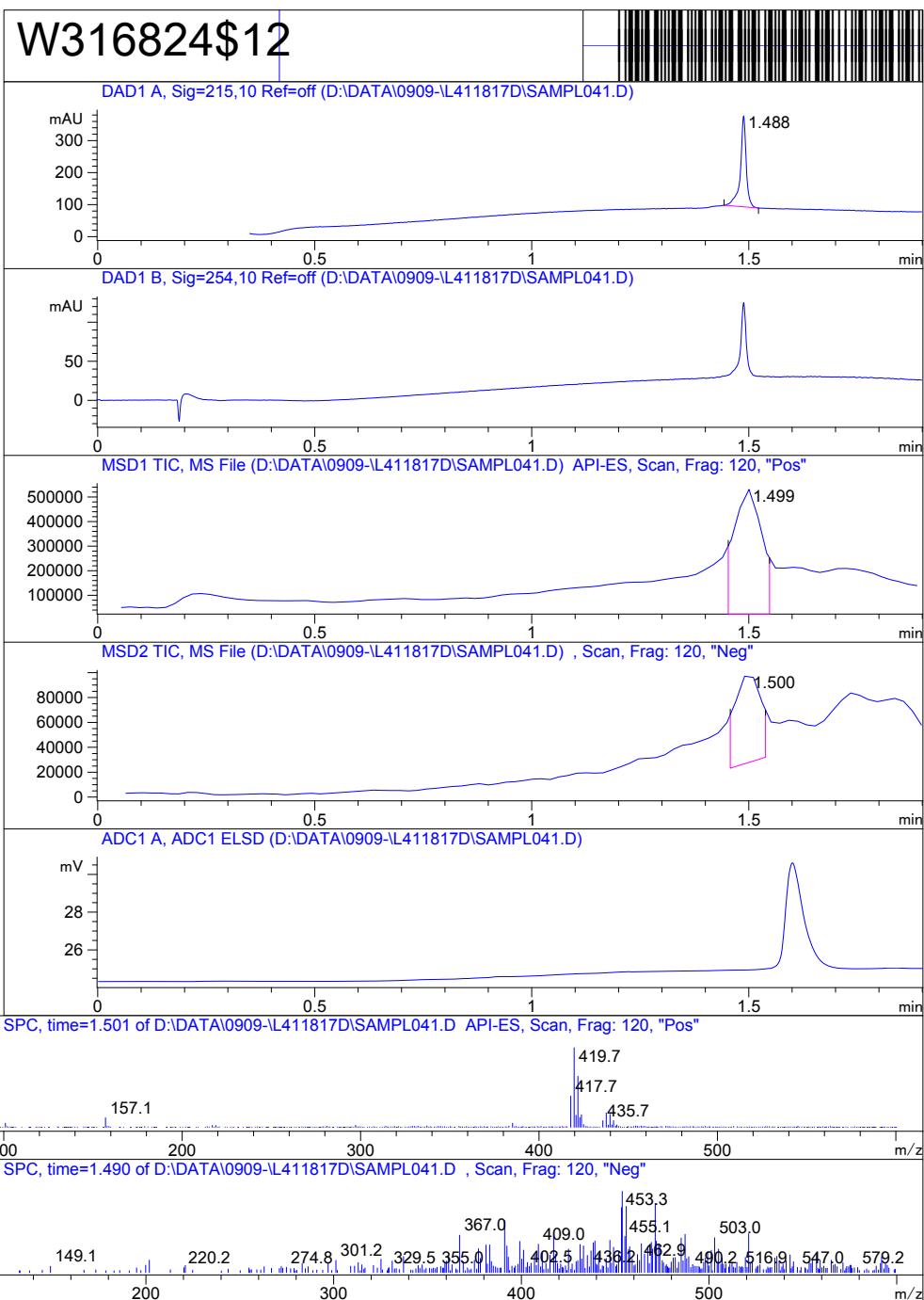
Z4989203251_

MaxPeak: 100.00%
Ret_Time: 1.488 min



Mol Wt 419.5
Exact Mass 418.89
Time Area%

1 1.488 100.00



Inj.Date 9/9/2021

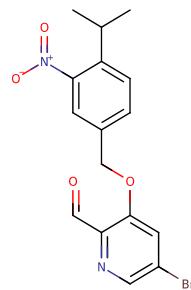
OA

-VL-

Acq. Method C:\HPCHEM\-> ->

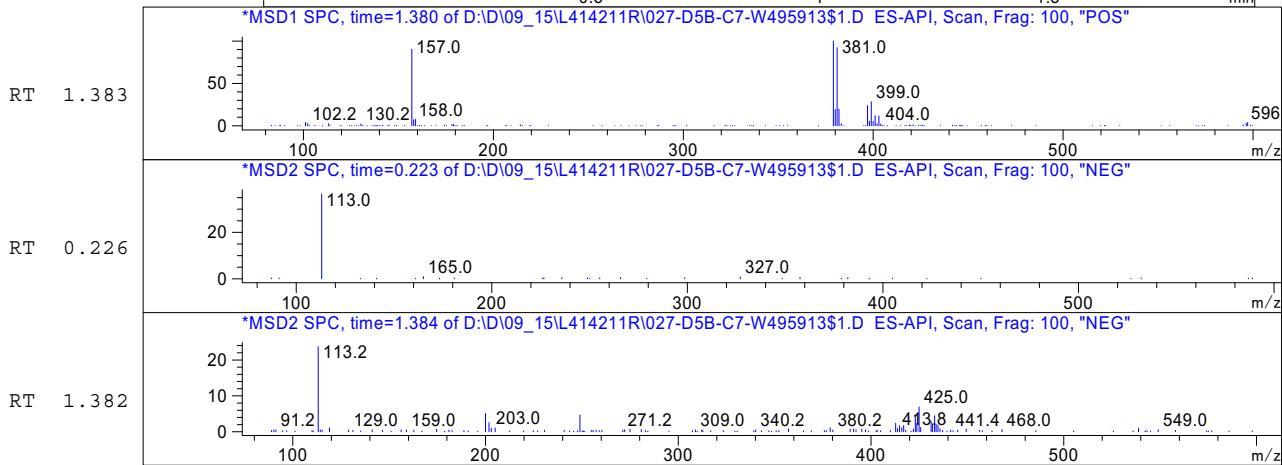
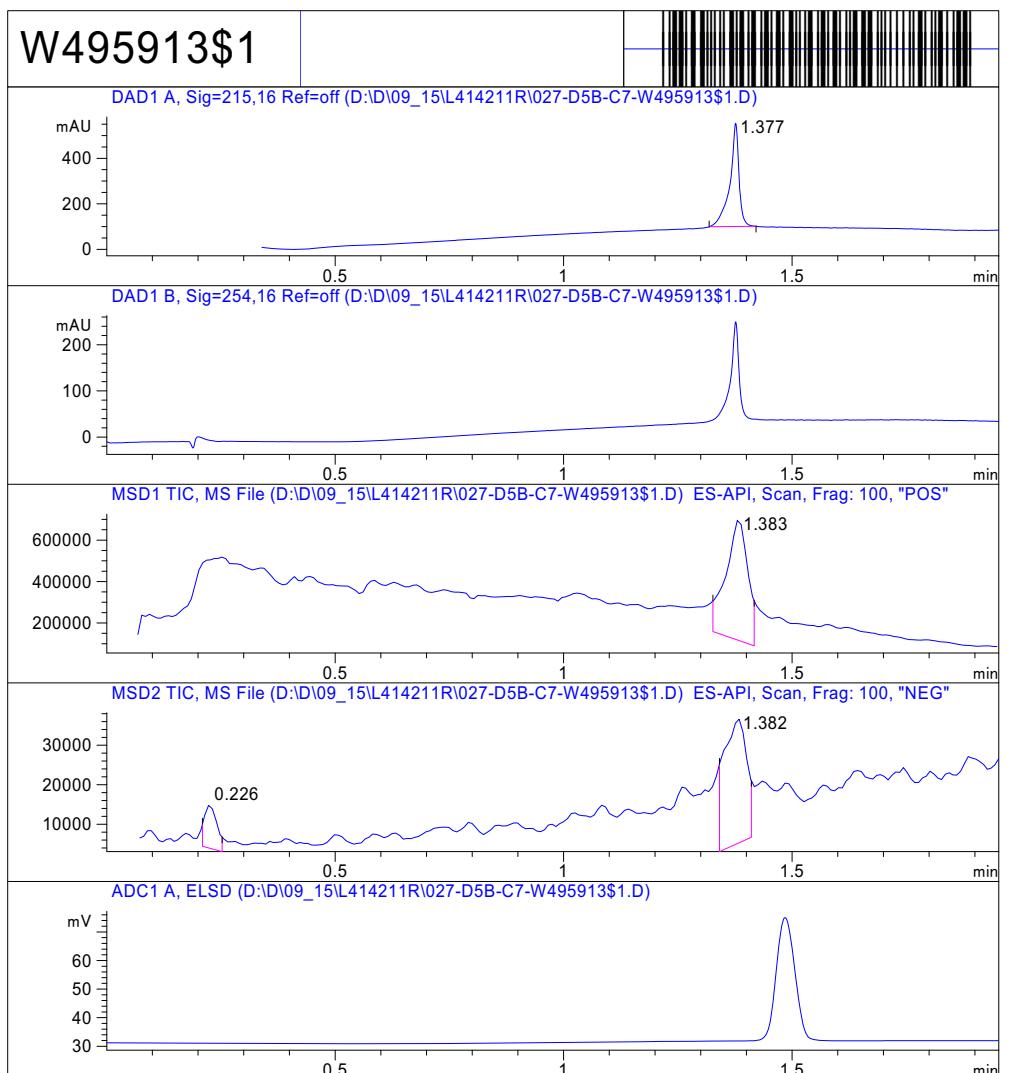
Z5192779061_

MaxPeak: 100.00%
Ret_Time: 1.377 min



Mol Wt 379.2
Exact Mass 378.03
Time Area%

1 1.377 100.00



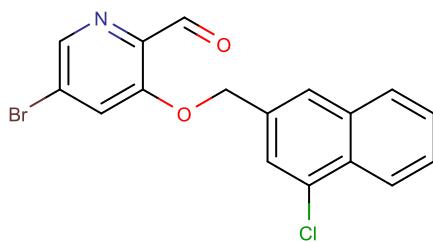
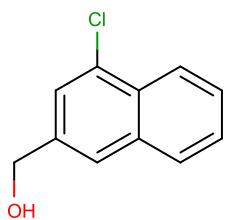
Inj.Date 9/15/2021

N

-12-

Acq. Method C:\Chem32\ -> ->

Z5247643566_



V942078-1

L411799F

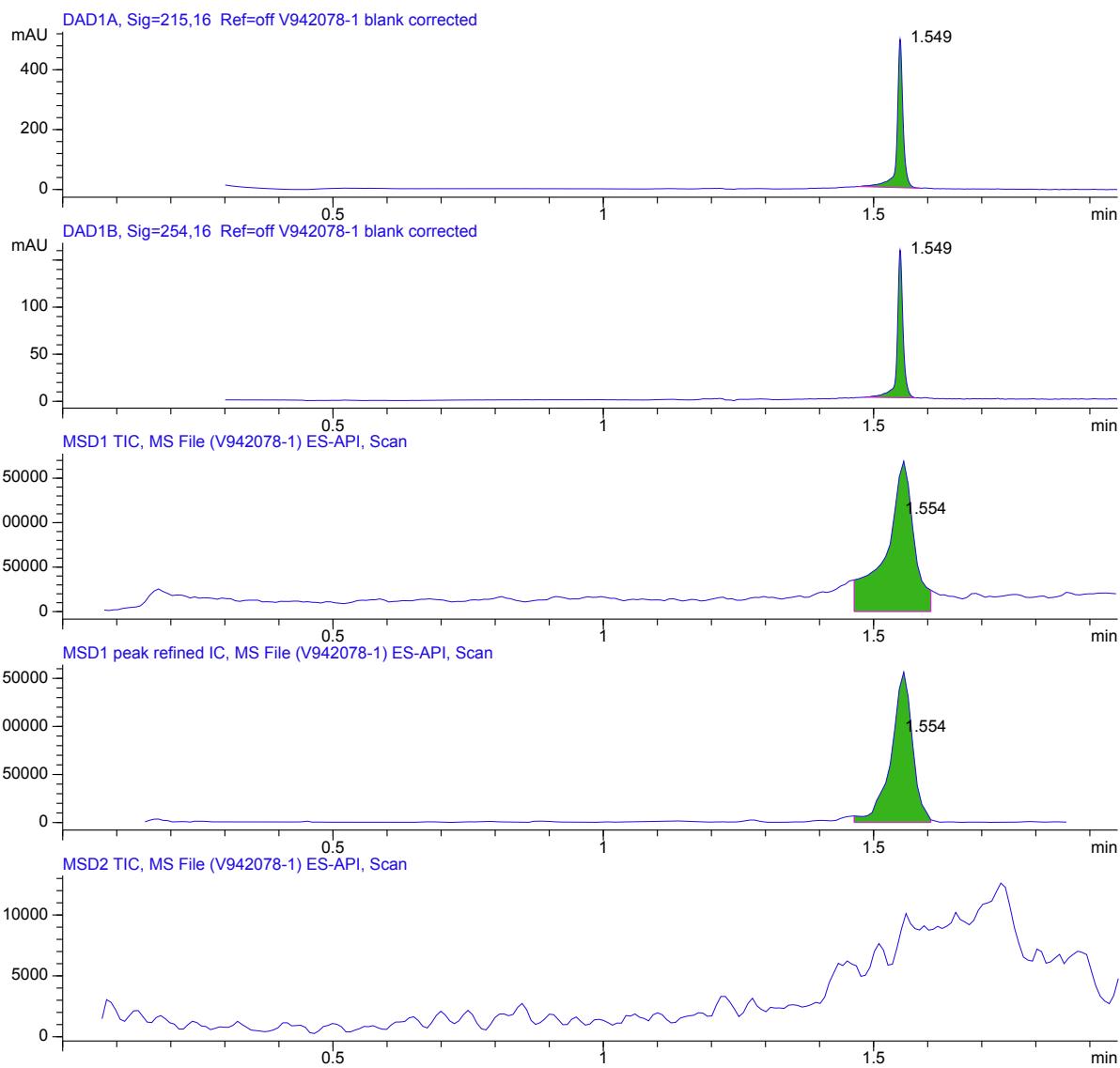
LCMS-16

SUPOR_30.M

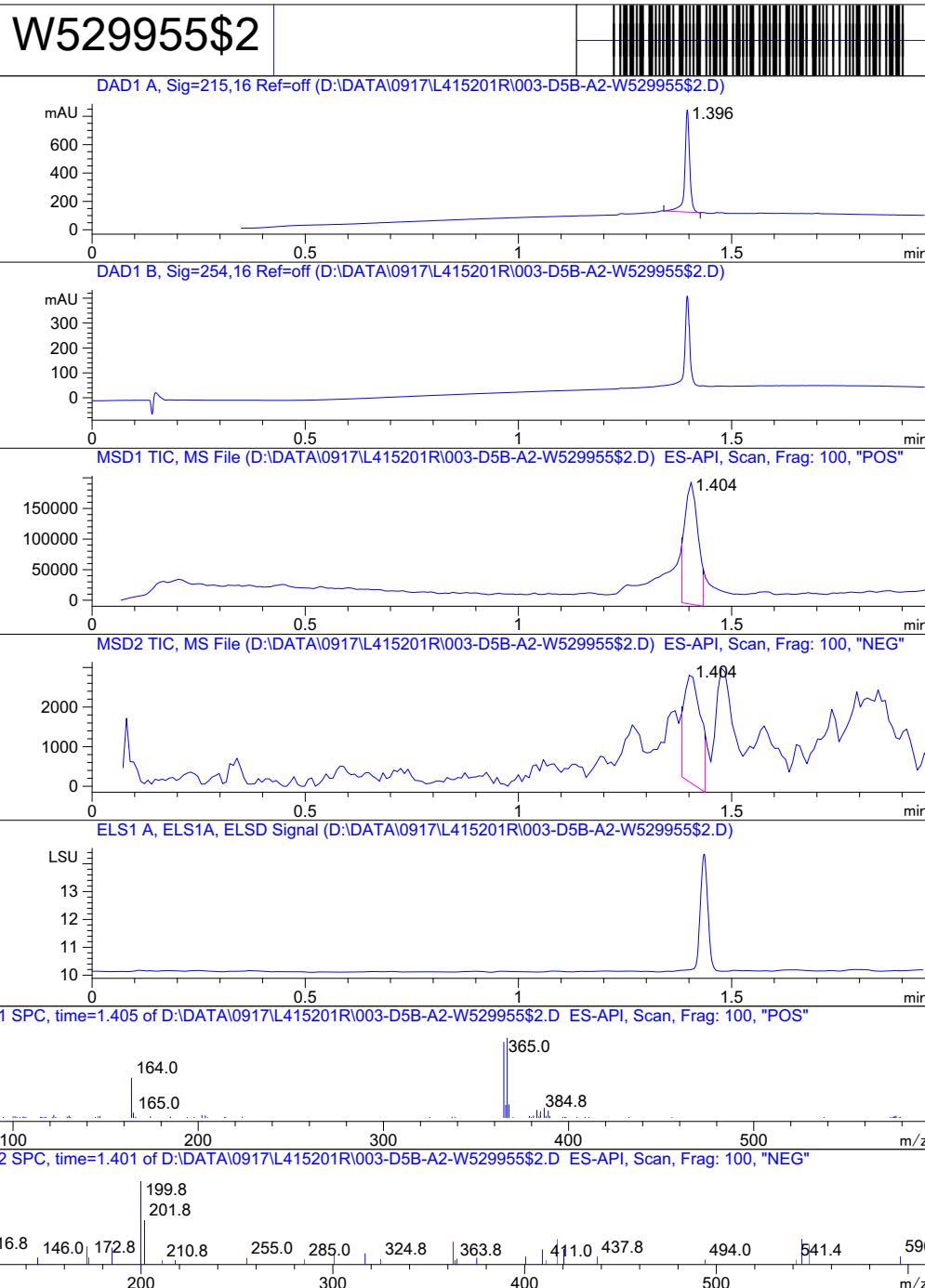
09:49 09.09.2021

MaxPeak: 100.0%

#	RT	DAD1A	DAD1B	MSD1	MSD2	ELSD	MSD1 ions	MSD1 rt	MSD2 ions	MSD2 rt	Info
1	1.549	100.0%	100.0%	100.0%	--	100.0%	175.0(51),377.8(26),375.8(16)	1.554	--	--	Reagent1 -OH,P +H+



MaxPeak: 100.00%
Ret_Time: 1.396 min



Inj.Date 9/17/2021

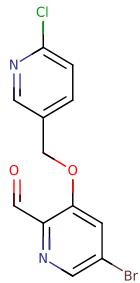
H

13

Acq. Method C:\Chem32\-> ->

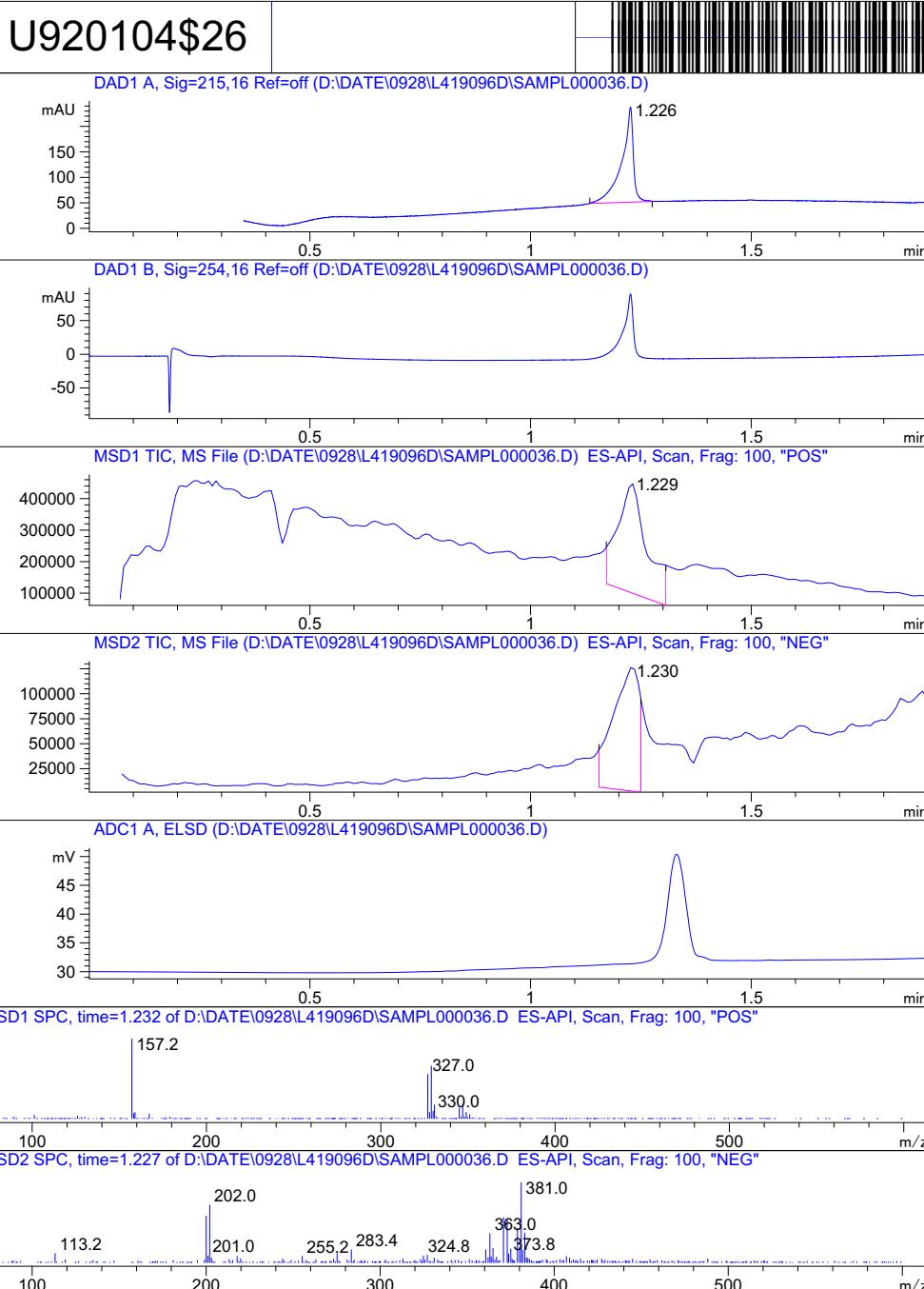
Z5247643564_

MaxPeak: 100.00%
Ret_Time: 1.226 min



Mol Wt 327.56
Exact Mass 327.95
Time Area%

1 1.226 100.00



Inj.Date 9/28/2021

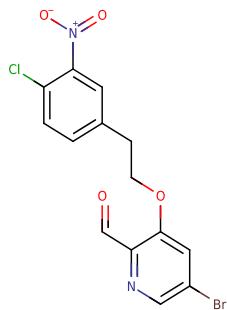
E

-5-

Acq. Method C:\CHEM32\ -> ->

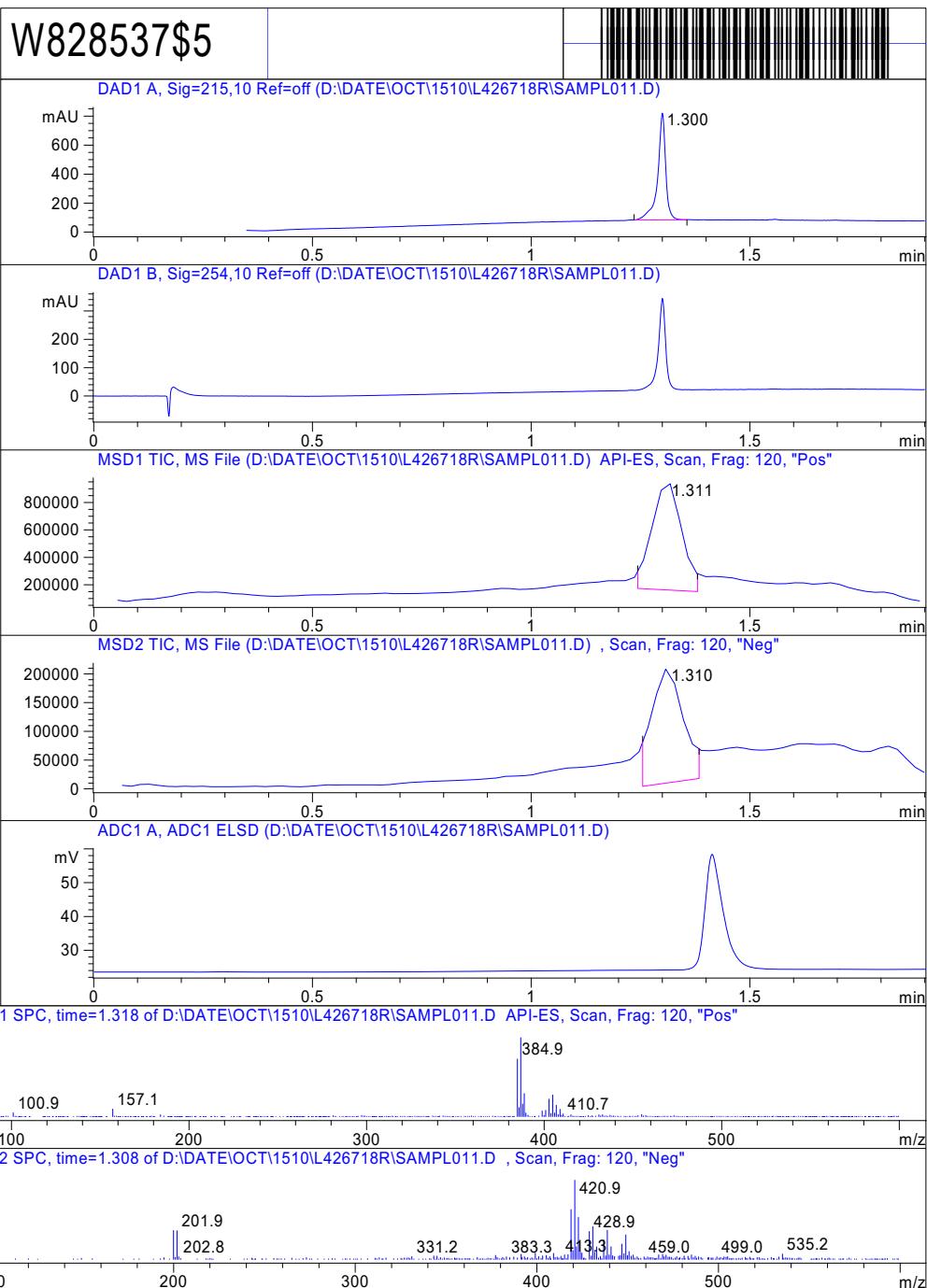
Z4954569140_

MaxPeak: 100.00%
Ret_Time: 1.300 min



Mol Wt 385.6
Exact Mass 385.95
Time Area%

1 1.300 100.00



Inj.Date 10/15/2021

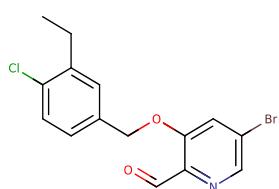
Y

-VL-

Acq. Method C:\HPCHEM\-> ->

Z5192779054_

MaxPeak: 100.00%
Ret_Time: 1.528 min

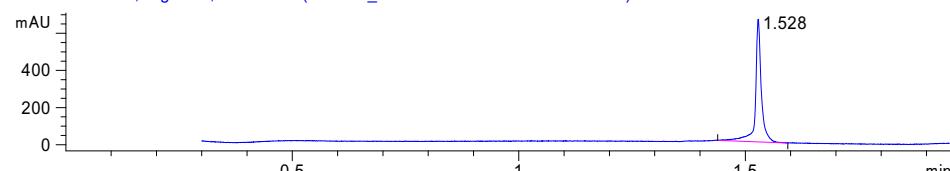


Mol Wt 354.63
Exact Mass 355
Time Area%

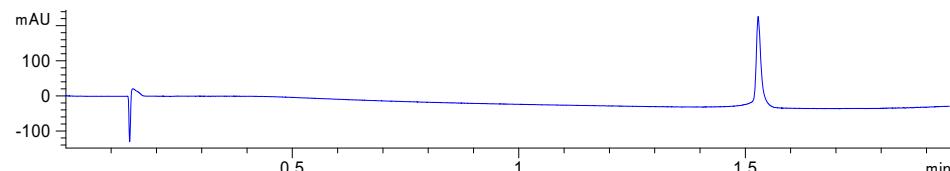
1 1.528 100.00

W938418\$2

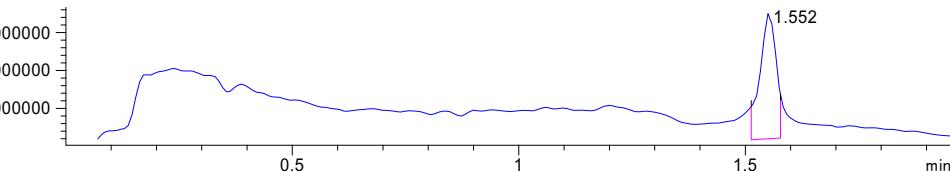
DAD1 A, Sig=215,16 Ref=off (D:\D\10_21\L429010R\SAMPL000016.D)



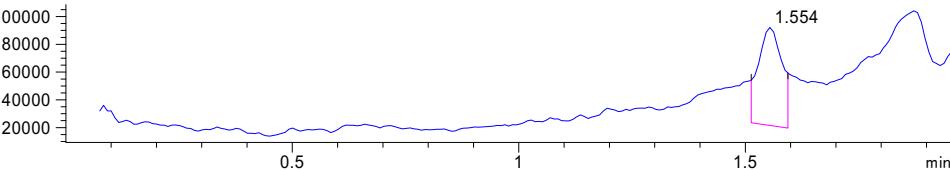
DAD1 B, Sig=254,16 Ref=off (D:\D\10_21\L429010R\SAMPL000016.D)



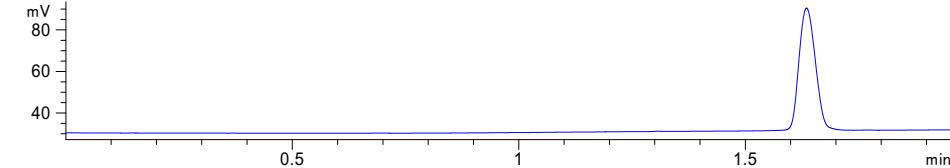
MSD1 TIC, MS File (D:\D\10_21\L429010R\SAMPL000016.D) ES-API, Scan, Frag: 100, "POS"



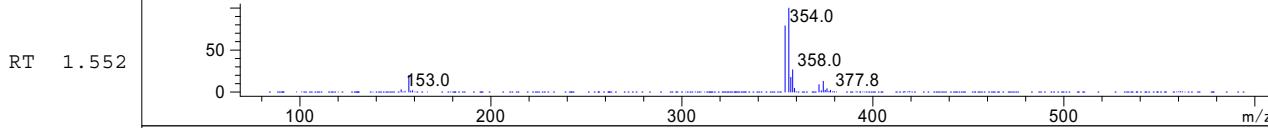
MSD2 TIC, MS File (D:\D\10_21\L429010R\SAMPL000016.D) ES-API, Scan, Frag: 100, "NEG"



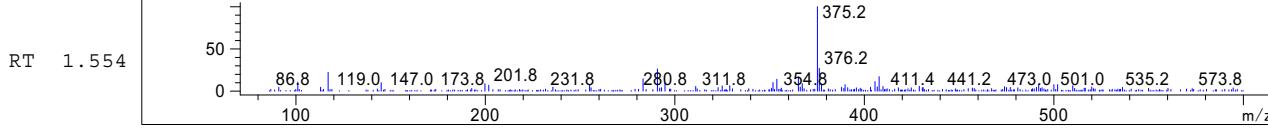
ADC1 A, ELSD (D:\D\10_21\L429010R\SAMPL000016.D)



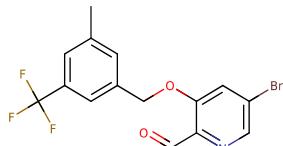
*MSD1 SPC, time=1.550 of D:\D\10_21\L429010R\SAMPL000016.D ES-API, Scan, Frag: 100, "POS"



*MSD2 SPC, time=1.554 of D:\D\10_21\L429010R\SAMPL000016.D ES-API, Scan, Frag: 100, "NEG"

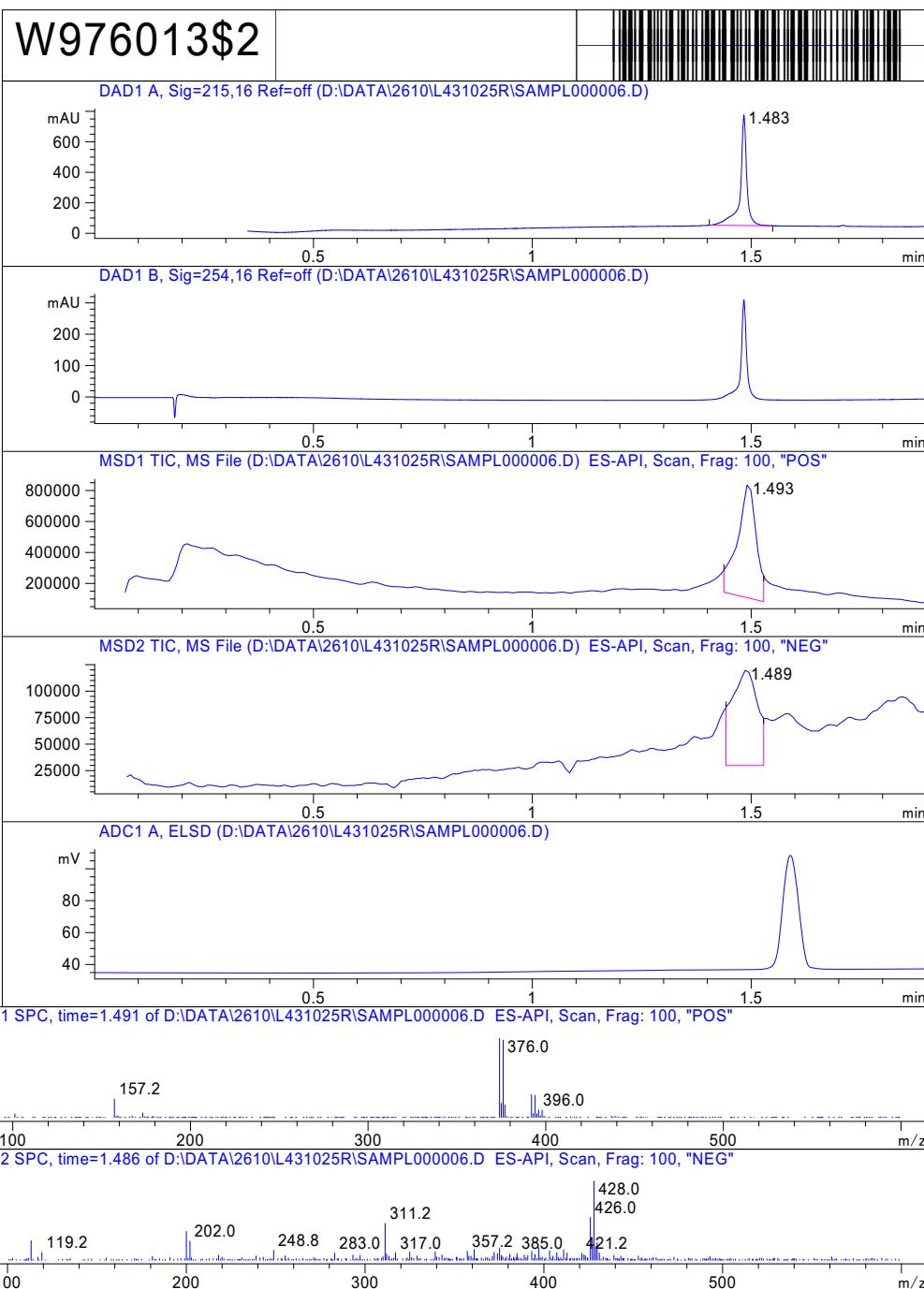


MaxPeak: 100.00%
Ret_Time: 1.483 min



Mol Wt 374.15
Exact Mass 373.01
Time Area%

1 1.483 100.00



Inj.Date 10/26/2021

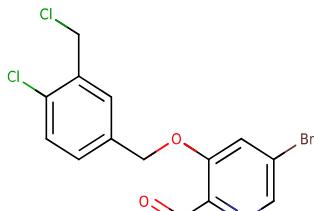
H

-5-

Acq. Method C:\CHEM32\-> ->

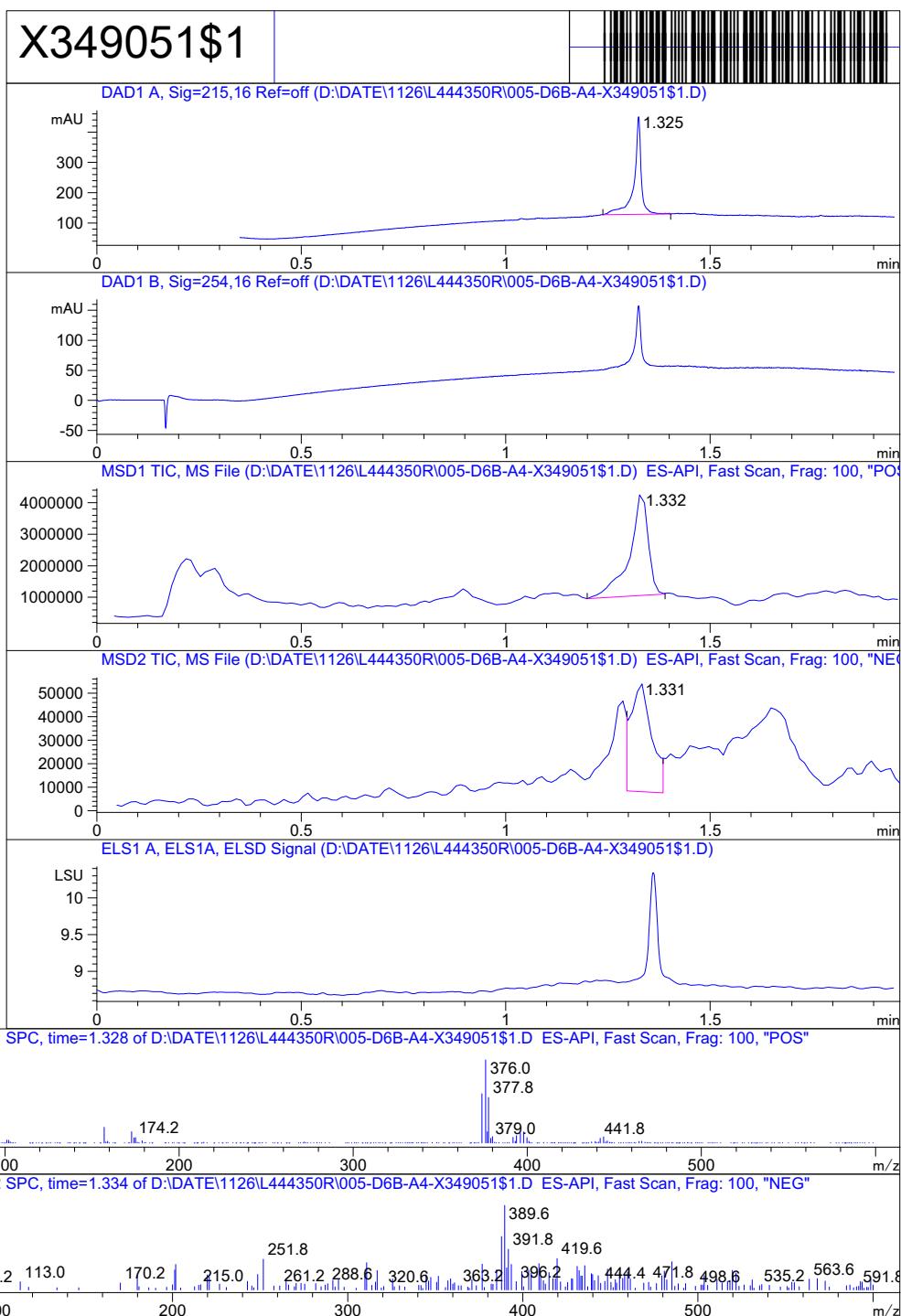
Z5336571669_

MaxPeak: 100.00%
Ret_Time: 1.325 min



Mol Wt 375.04
Exact Mass 374.94

#	Time	Area%
1	1.325	100.00



Analysis Report

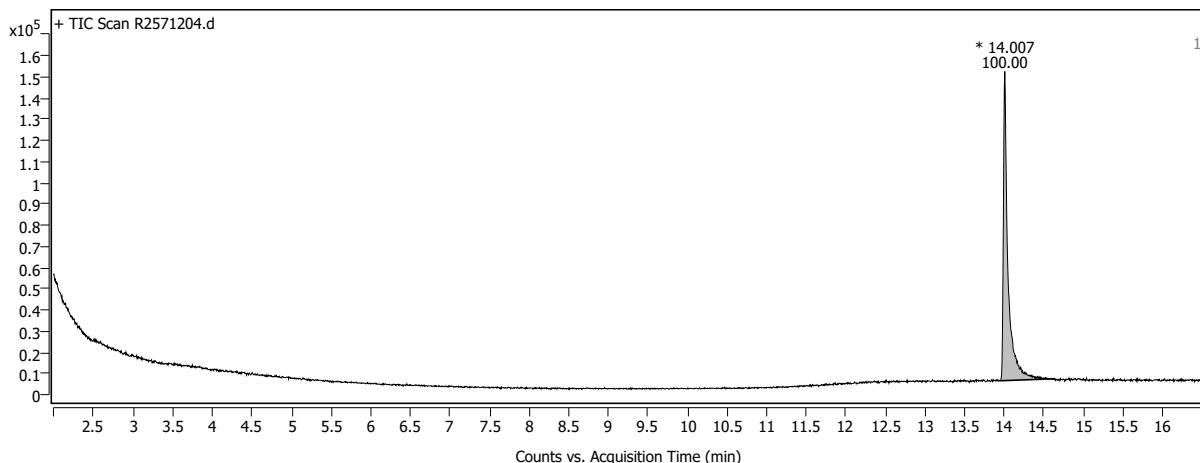


Sample Information

Name R2571204
Comment CH3CN
Instrument GCMS-5
Position 33

Data File Path D:\MassHunter\GCMS\1\data\04_20\R2571204.D
Acq. Time (Local) 20-Apr-21 22:22:08 (UTC+03:00)
Method Path (Acq) D:\MassHunter\GCMS\1\methods\UNIV_ACN.M

Sample Chromatograms

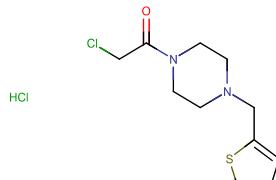


Chromatogram Peaks			
Peak	RT	Area	Area Sum %
1	14.007	594625	100.00

MassHunter Qual 10.0
(End of Report)

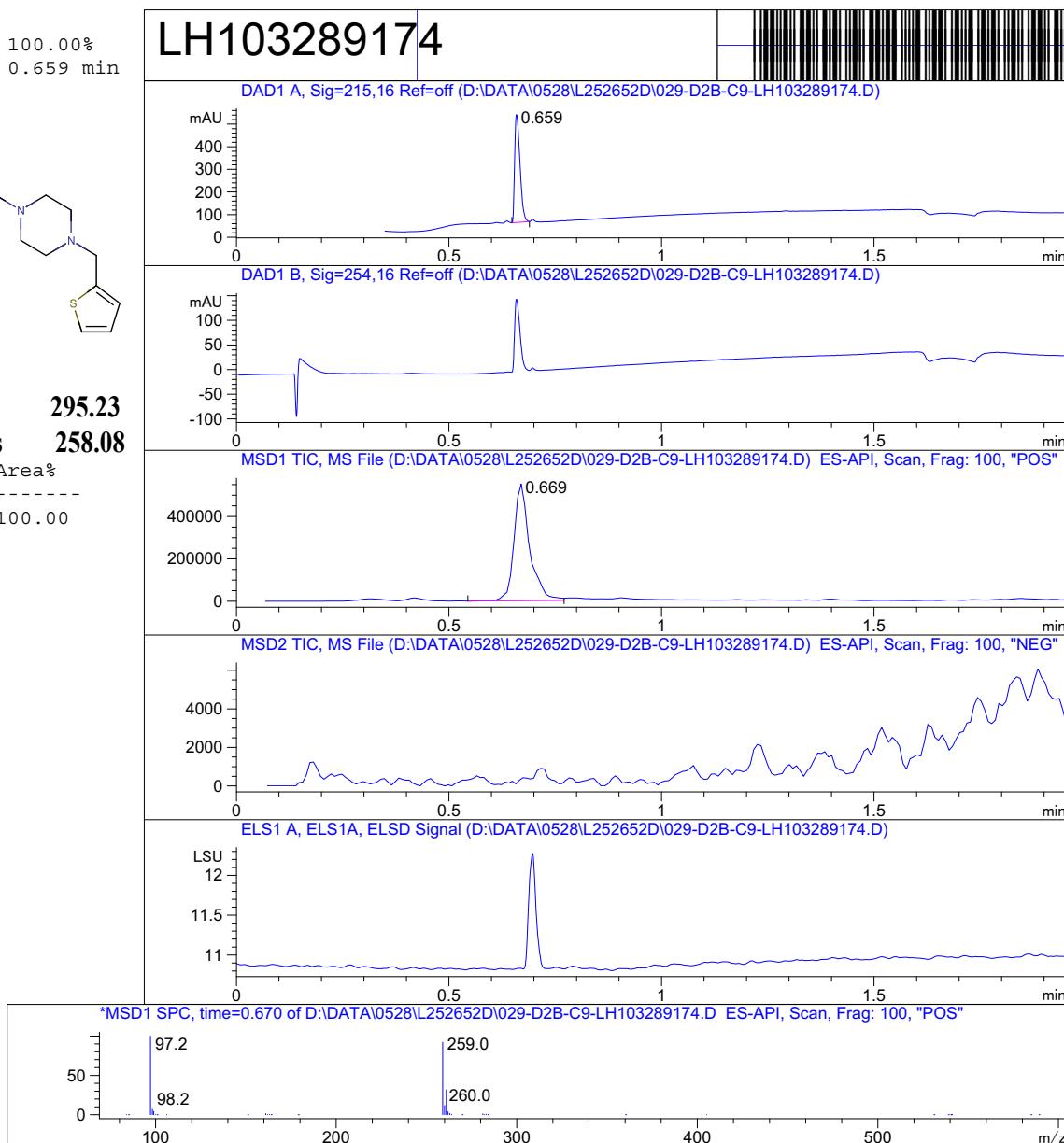
MaxPeak: 100.00%
Ret_Time: 0.659 min

LH103289174



Mol Wt 295.23
Exact Mass 258.08
Time Area%

1 0.659 100.00



Inj.Date 5/28/2020

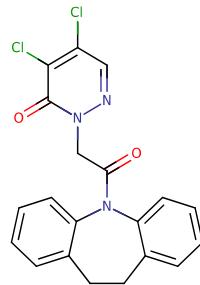
M

-15-

Acq. Method C:\Chem32\ -> ->

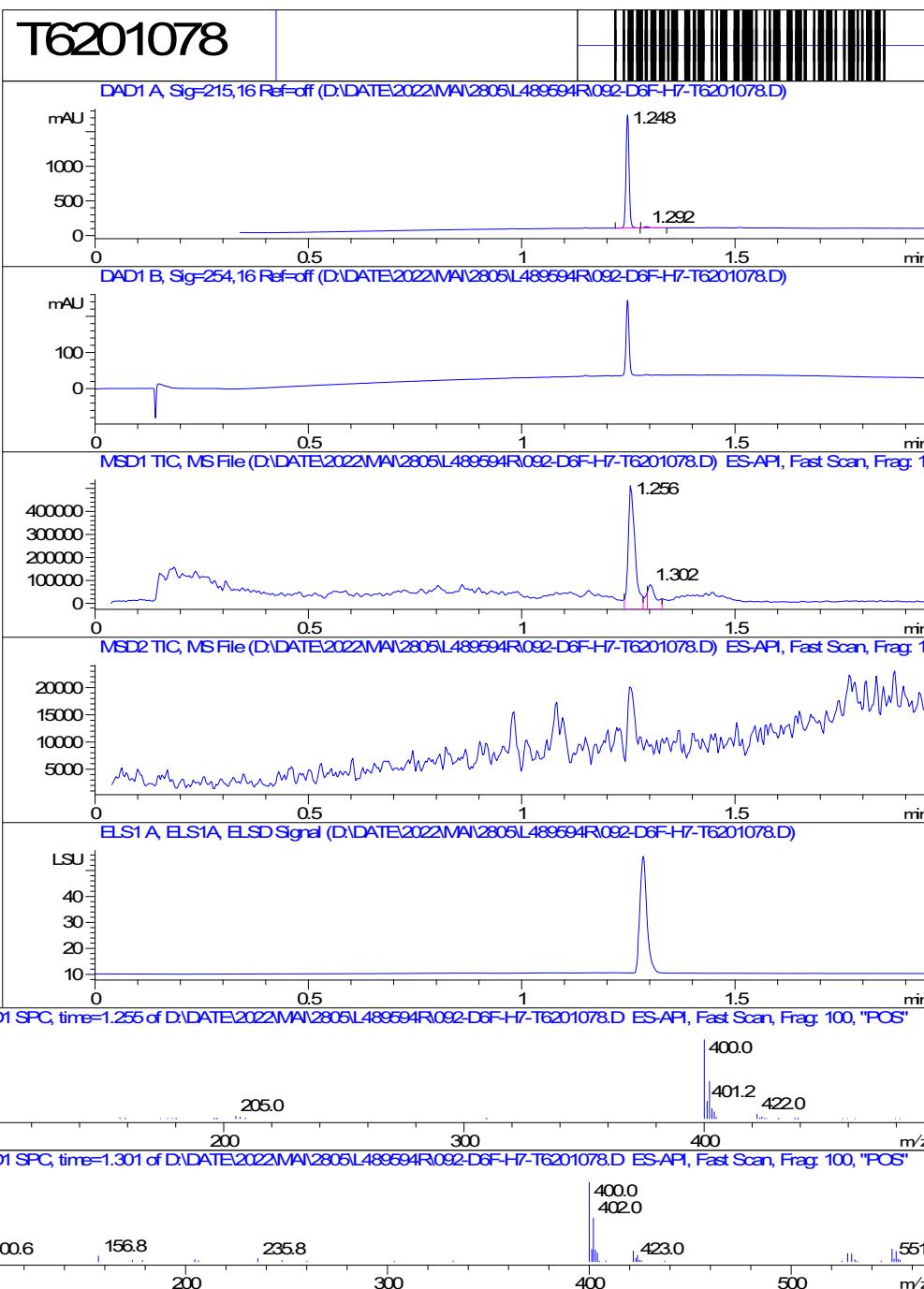
Z147647874_

MaxPeak: 98.15%
Ret_Time: 1.248 min



Mol Wt 400.26
Exact Mass 399.07
Time Area%

1 1.248 98.15
2 1.292 1.85



Inj .Date 28-May-22

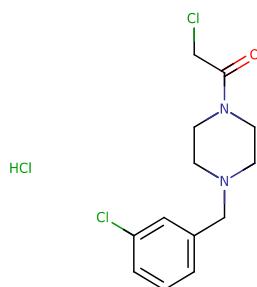
Z

<invalid>

Acq. Method C:\Users\ -> ->

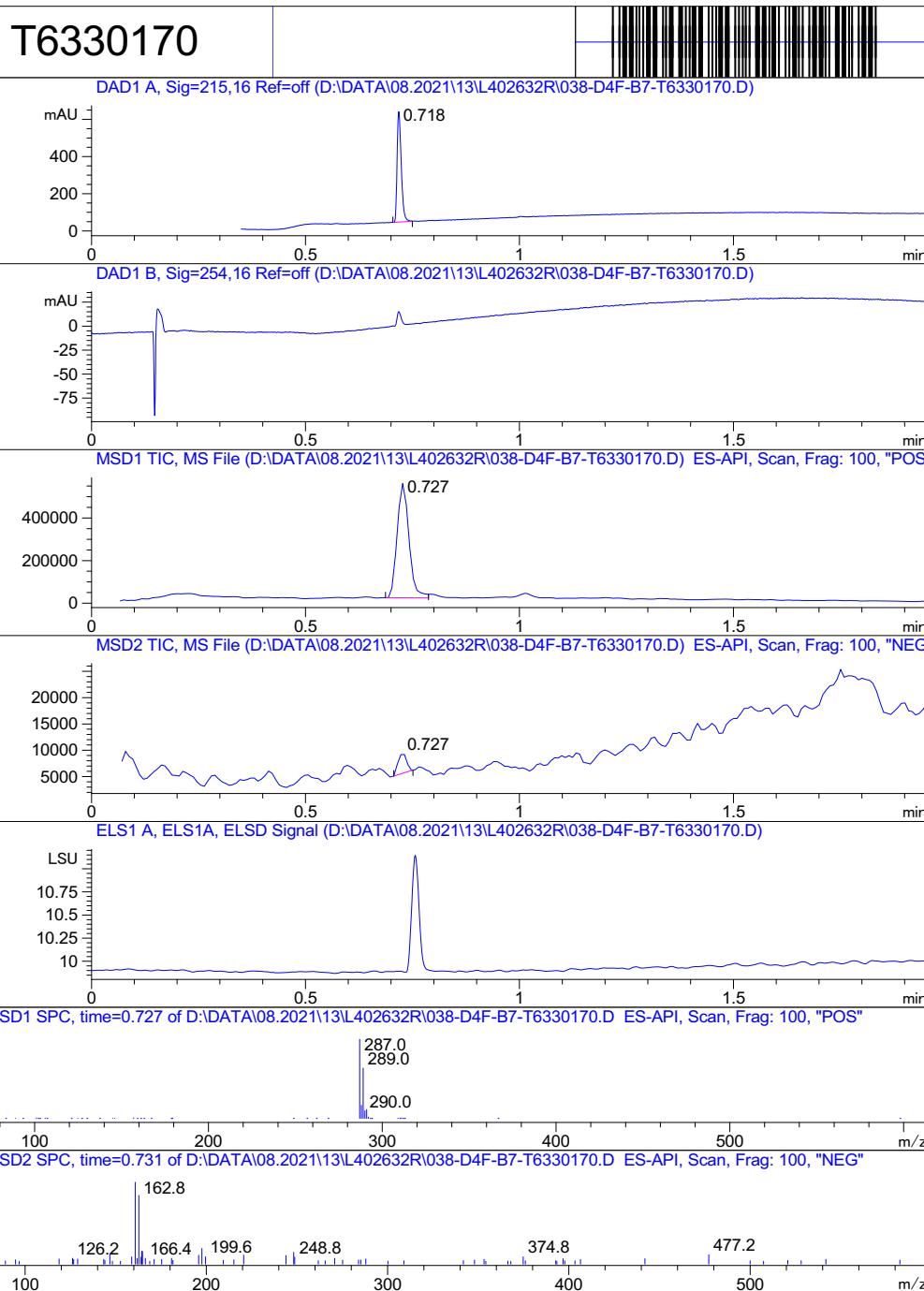
Z335721330_

MaxPeak: 100.00%
Ret_Time: 0.718 min



Mol Wt 323.65
Exact Mass 286.09
Time Area%

1 0.718 100.00



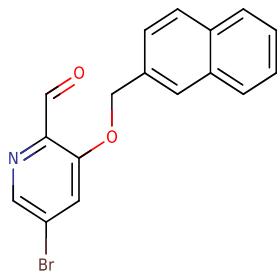
Inj.Date 8/13/2021

CH <invalid> -18-

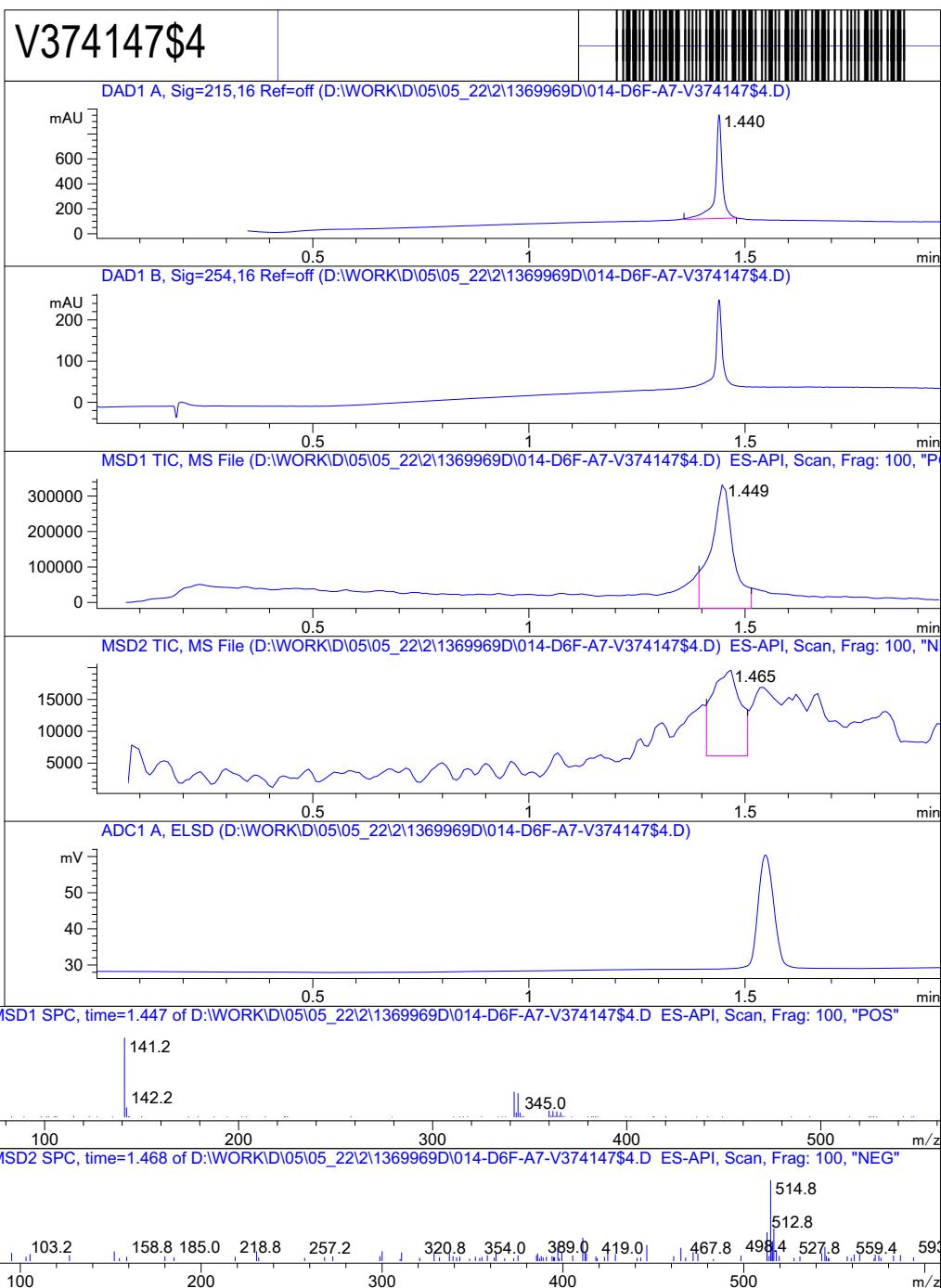
Acq. Method C:\Chem32\-> ->

Z147647726_

MaxPeak: 100.00%
Ret_Time: 1.440 min



Mol Wt 342.19
Exact Mass 341.02
Time Area%
1 1.440 100.00



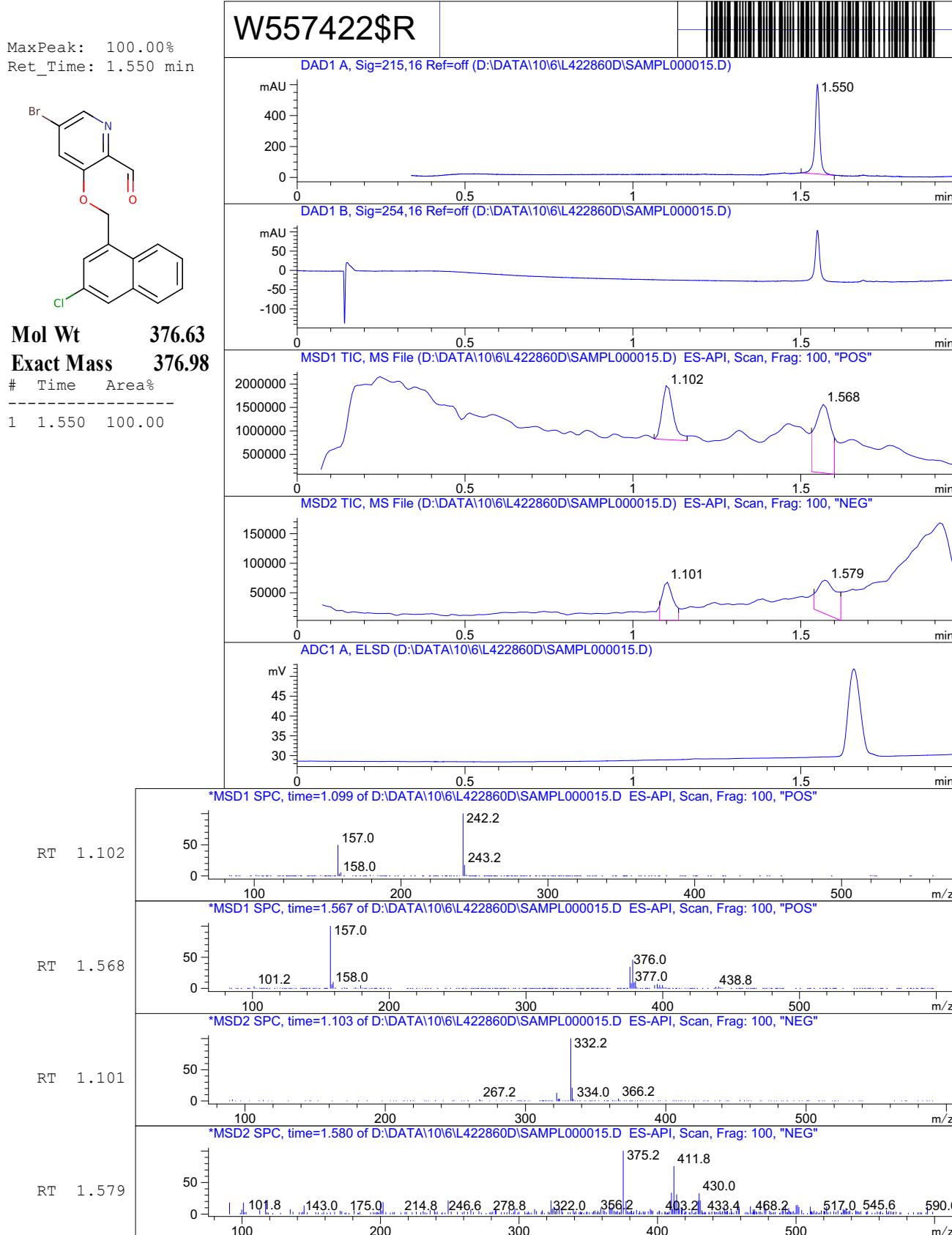
Inj.Date 5/22/2021

K

-12-

Acq. Method C:\Chem32\ -> ->

Z4658847356_



Inj.Date 10/6/2021

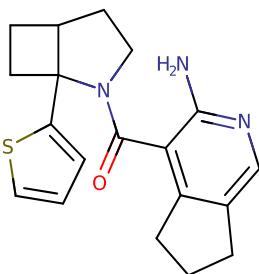
LB

-3-

Acq. Method C:\CHEM32\-> ->

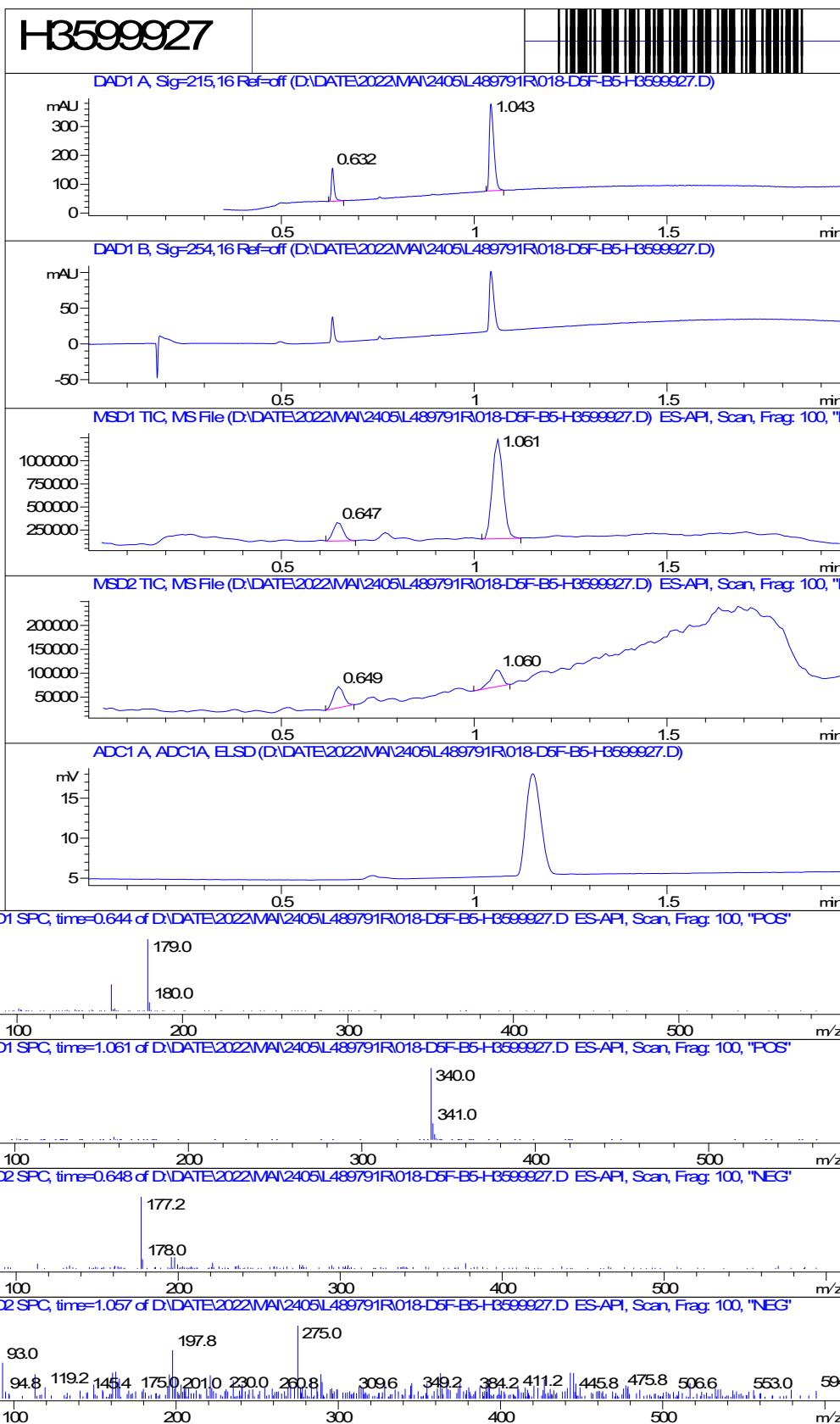
Z5192779122_

MaxPeak: 80.83%
Ret_Time: 1.043 min



Mol Wt 339.46
Exact Mass 339.17
Time Area%

#	Time	Area%
1	0.632	19.17
2	1.043	80.83



Inj.Date 24-May-22

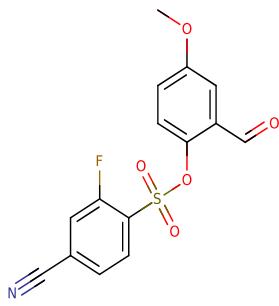
Z

<invalid> -25-

Acq. Method C:\Users\ -> ->

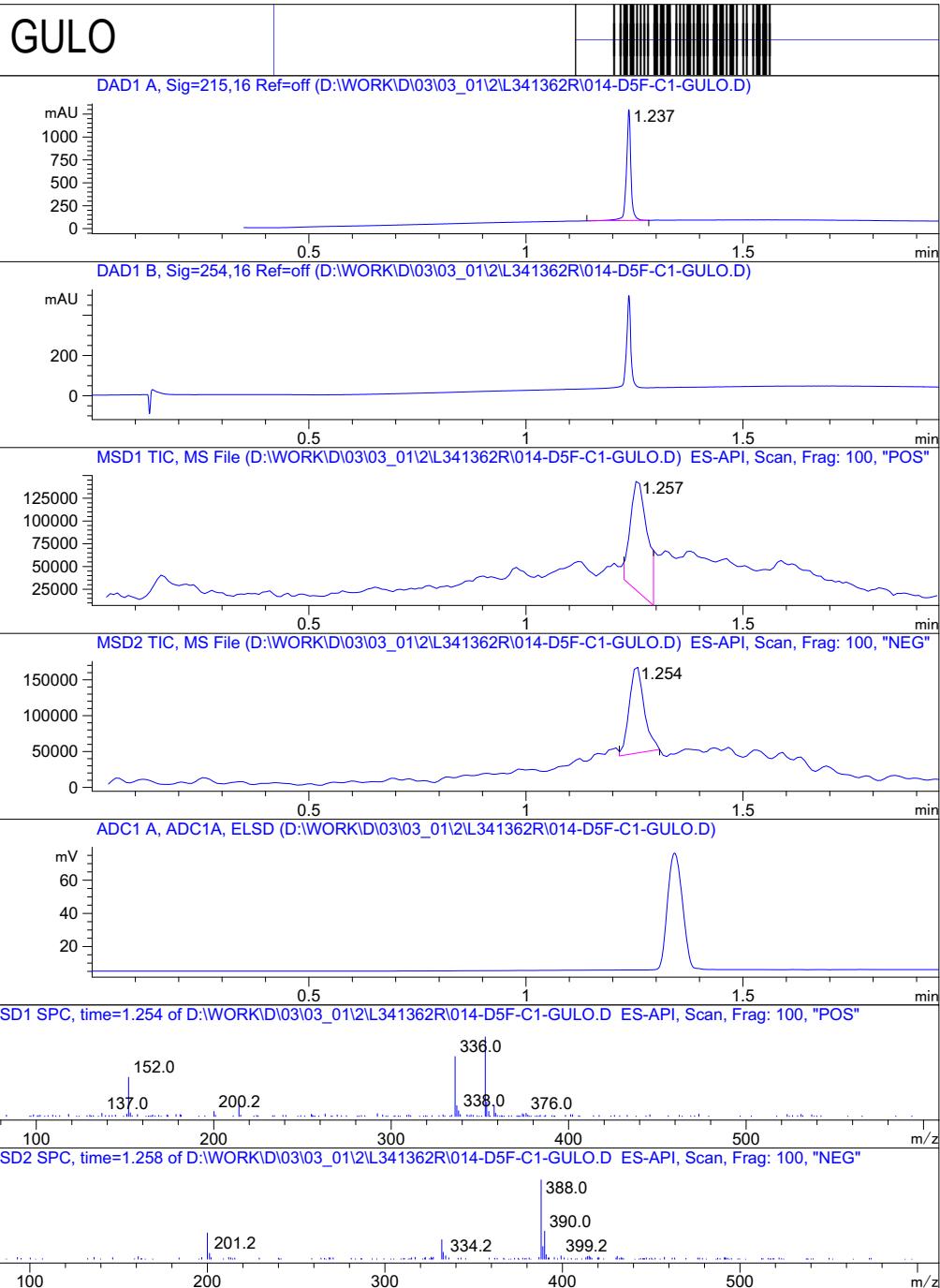
Z4124468376_

MaxPeak: 100.00%
Ret_Time: 1.237 min



Mol Wt 335.31
Exact Mass 335.02
Time Area%

1 1.237 100.00



Inj.Date 3/1/2021

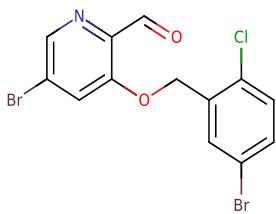
K

-25-

Acq. Method C:\Users\ -> ->

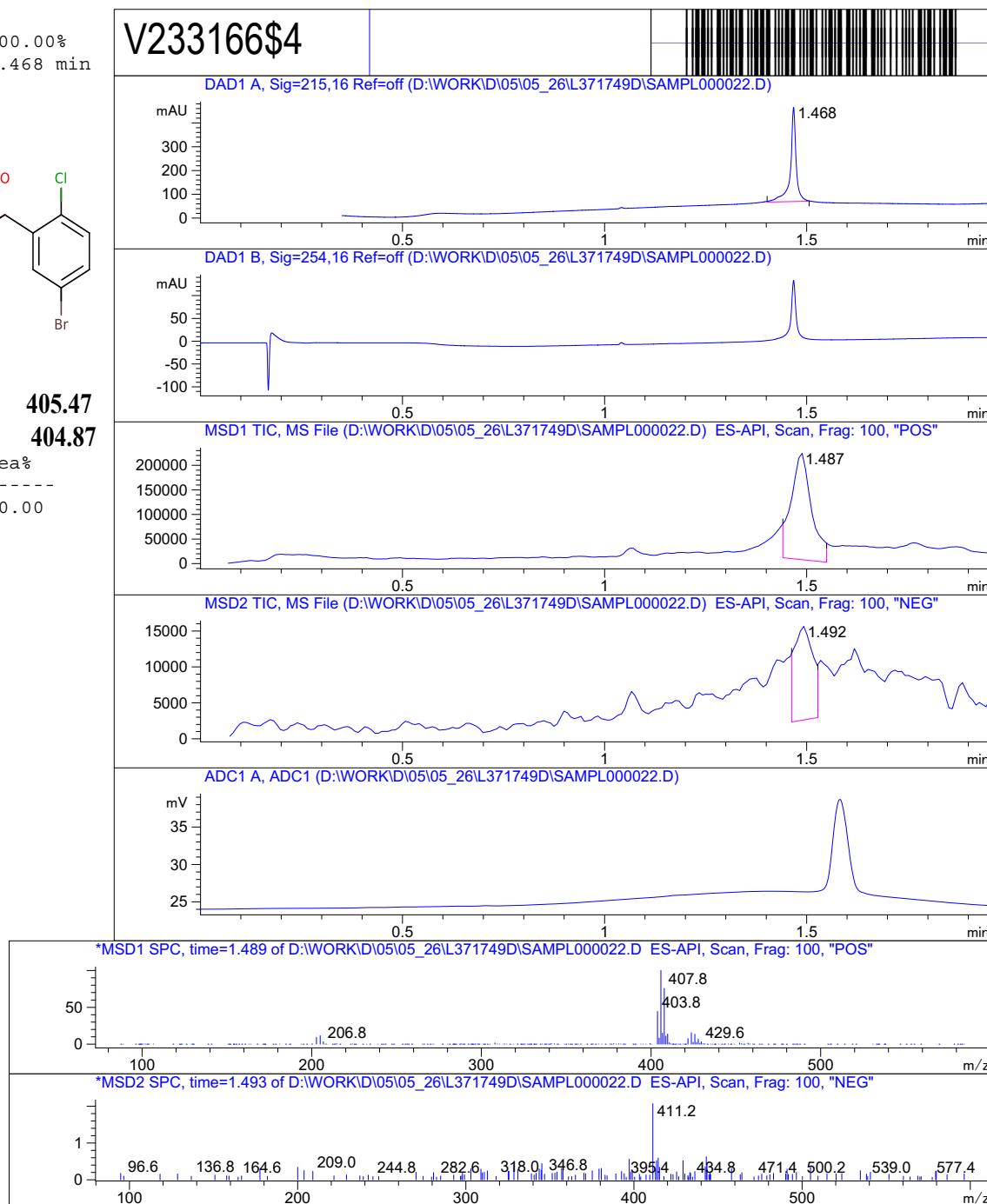
Z1247383311_

MaxPeak: 100.00%
Ret_Time: 1.468 min



Mol Wt 405.47
Exact Mass 404.87
Time Area%

1 1.468 100.00



Inj.Date 5/26/2021

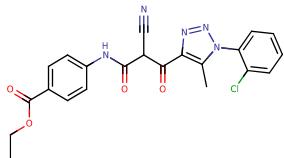
K

- 4 -

Acq. Method C:\CHEM32\ -> ->

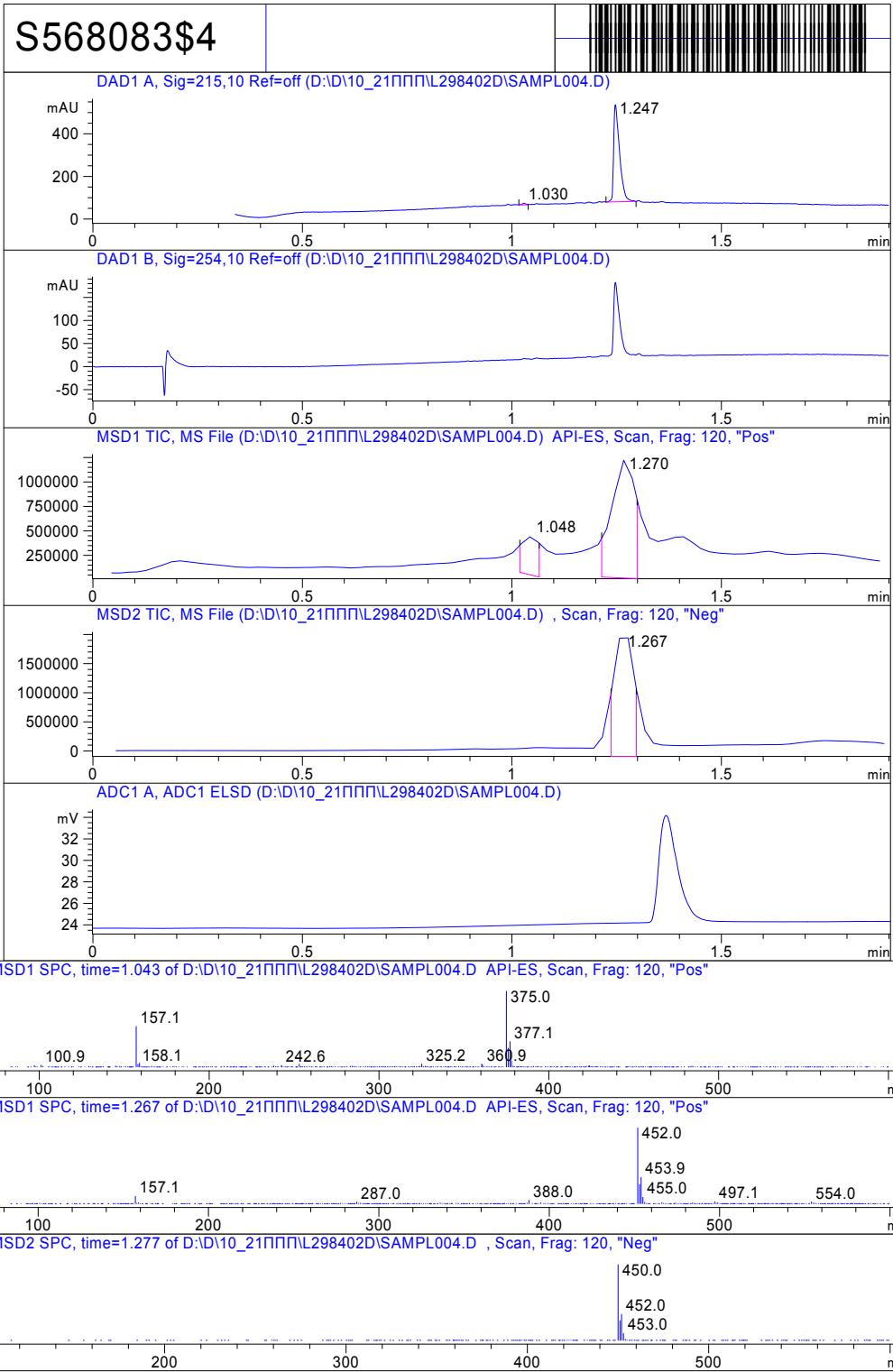
Z5009000155_

MaxPeak: 98.93%
Ret_Time: 1.247 min



Mol Wt 451.86
Exact Mass 451.11
Time Area%

1	1.030	1.07
2	1.247	98.93



Inj.Date 10/22/2020

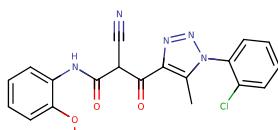
N

-VL-

Acq. Method C:\HPCHEM\ -> ->

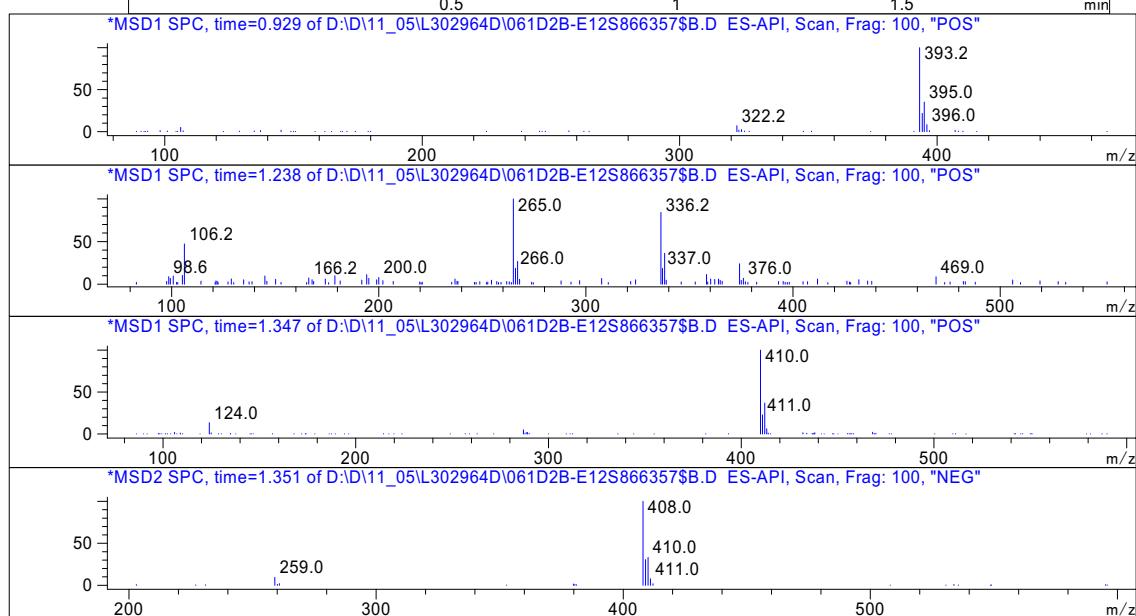
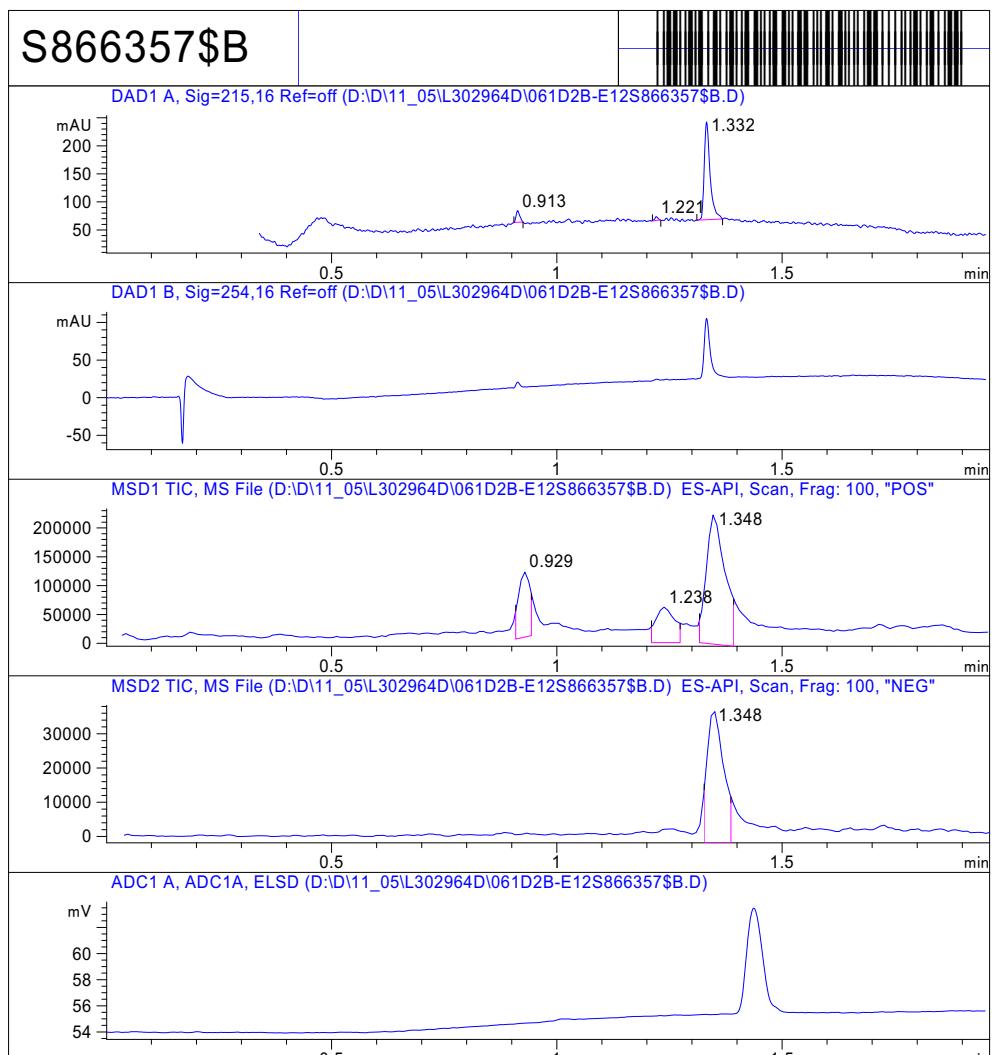
Z1123372000_

MaxPeak: 91.40%
Ret_Time: 1.332 min



Mol Wt 409.83
Exact Mass 409.1
Time Area%

1	0.913	6.77
2	1.221	1.83
3	1.332	91.40



Inj.Date 11/5/2020

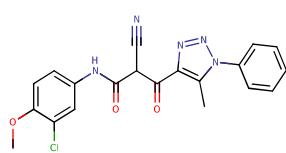
N

-11-

Acq. Method C:\Chem32\ ->

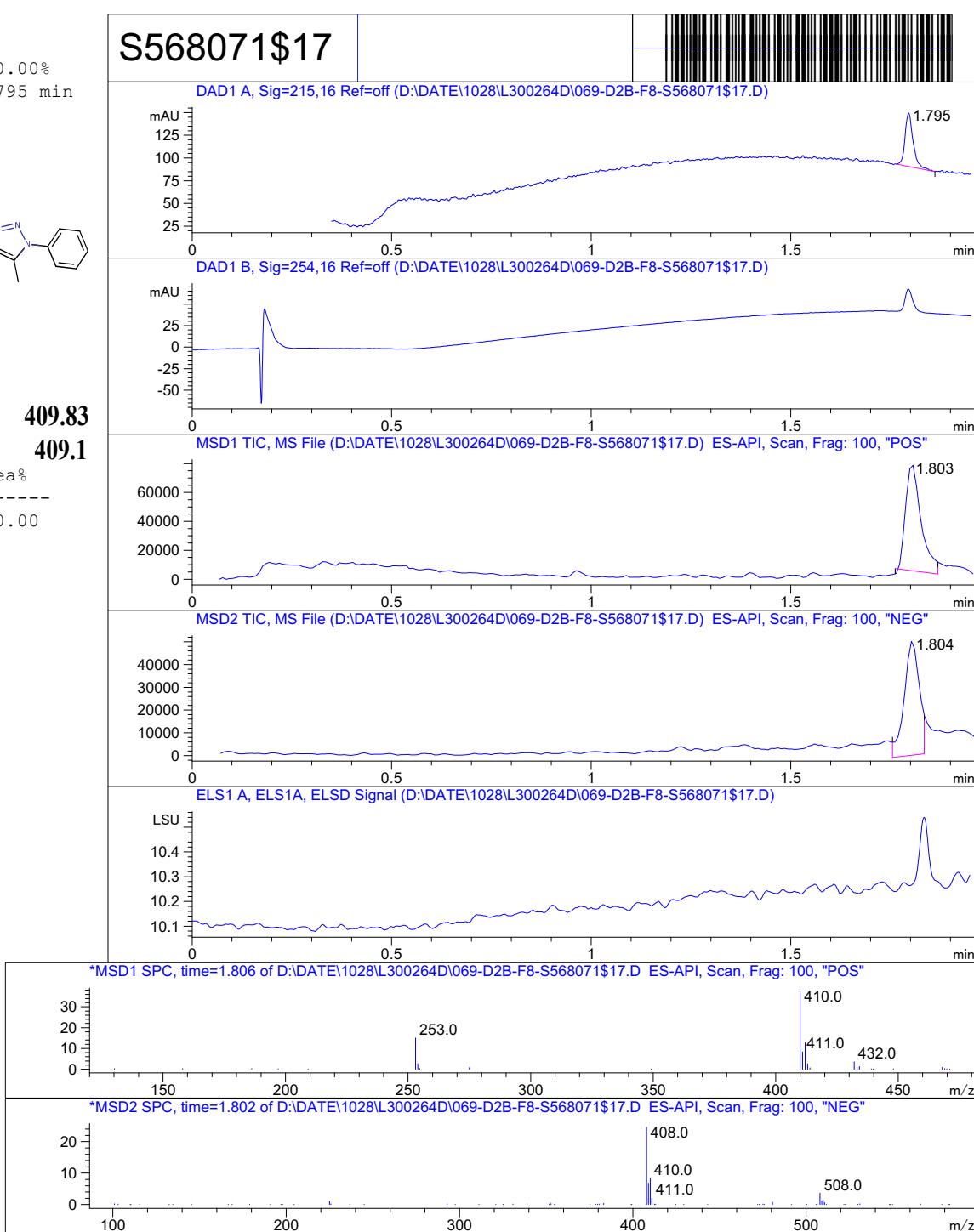
Z1123371668_

MaxPeak: 100.00%
Ret_Time: 1.795 min

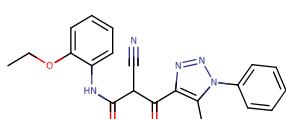


Mol Wt 409.83
Exact Mass 409.1

#	Time	Area%
1	1.795	100.00

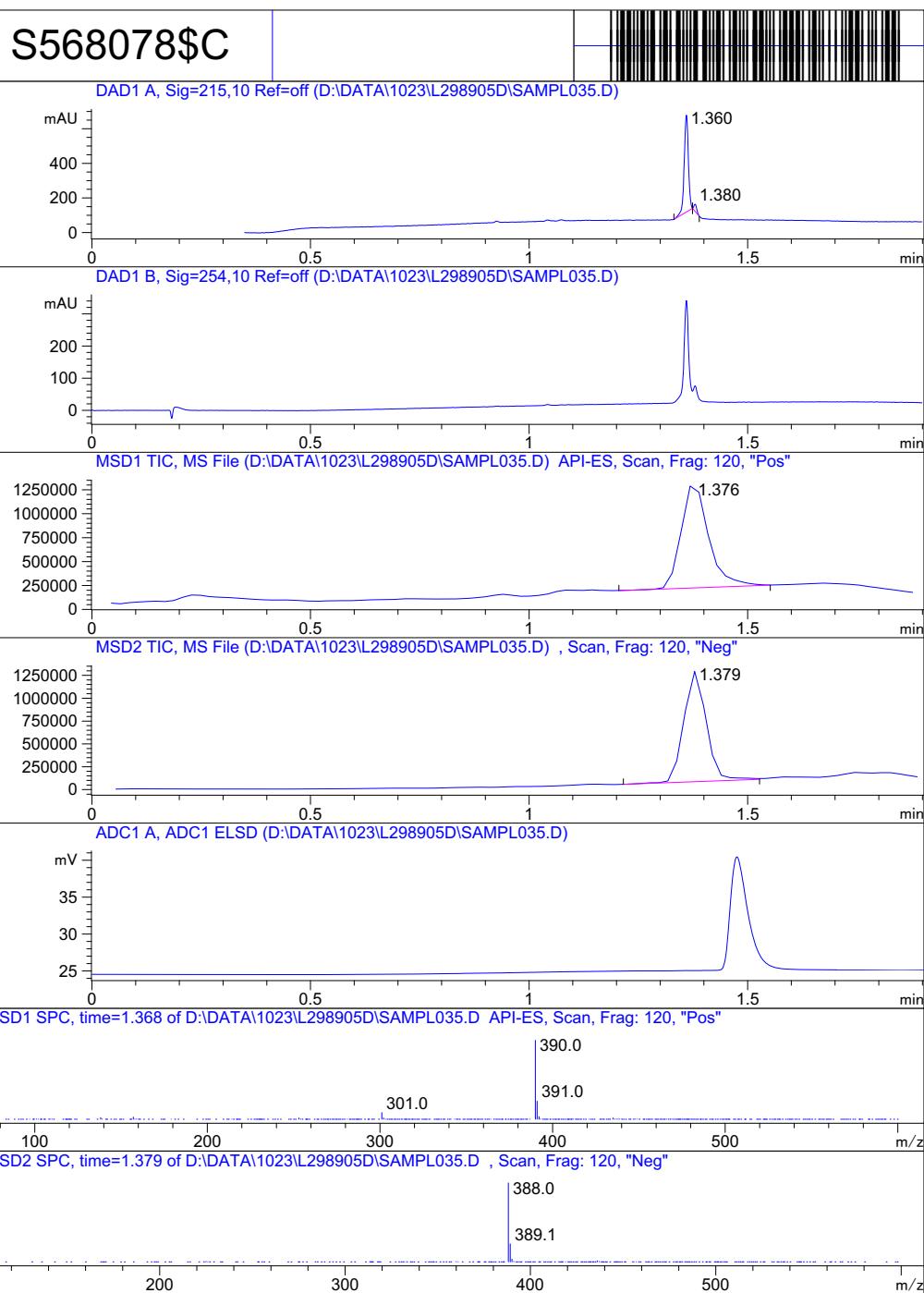


MaxPeak: 95.28%
Ret_Time: 1.360 min



Mol Wt 389.41
Exact Mass 389.16

#	Time	Area%
1	1.360	95.28
2	1.380	4.72



Inj.Date 10/23/2020

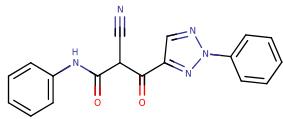
OA

-VL-

Acq. Method C:\HPCHEM\-> ->

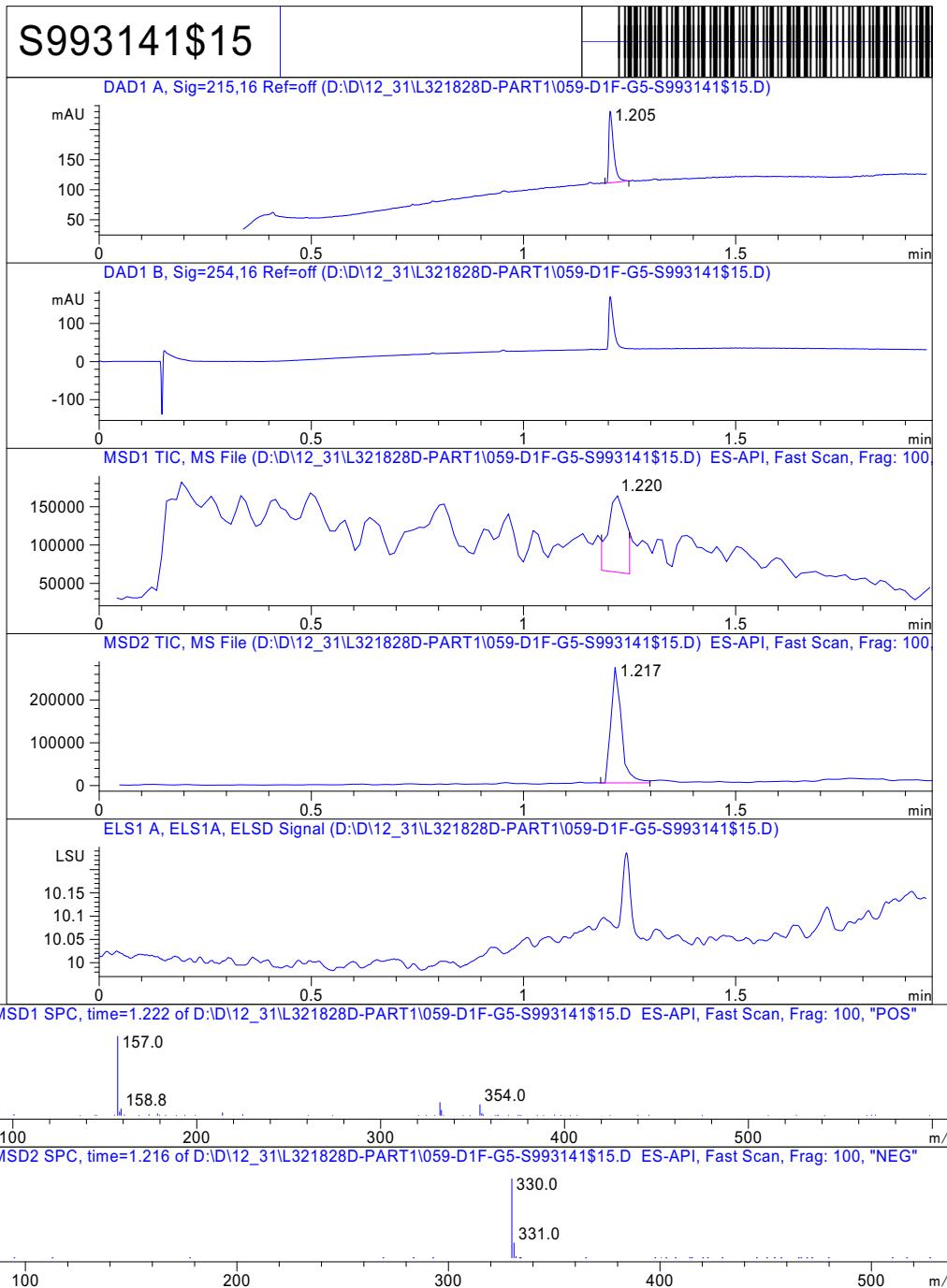
Z762210282_

MaxPeak: 100.00%
Ret_Time: 1.205 min



Mol Wt 331.33
Exact Mass 331.11
Time Area%

1 1.205 100.00



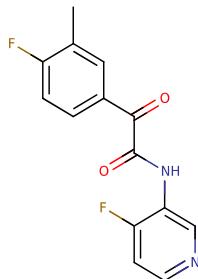
Inj.Date 12/30/2020

N

Acq. Method C:\Users\ -> ->

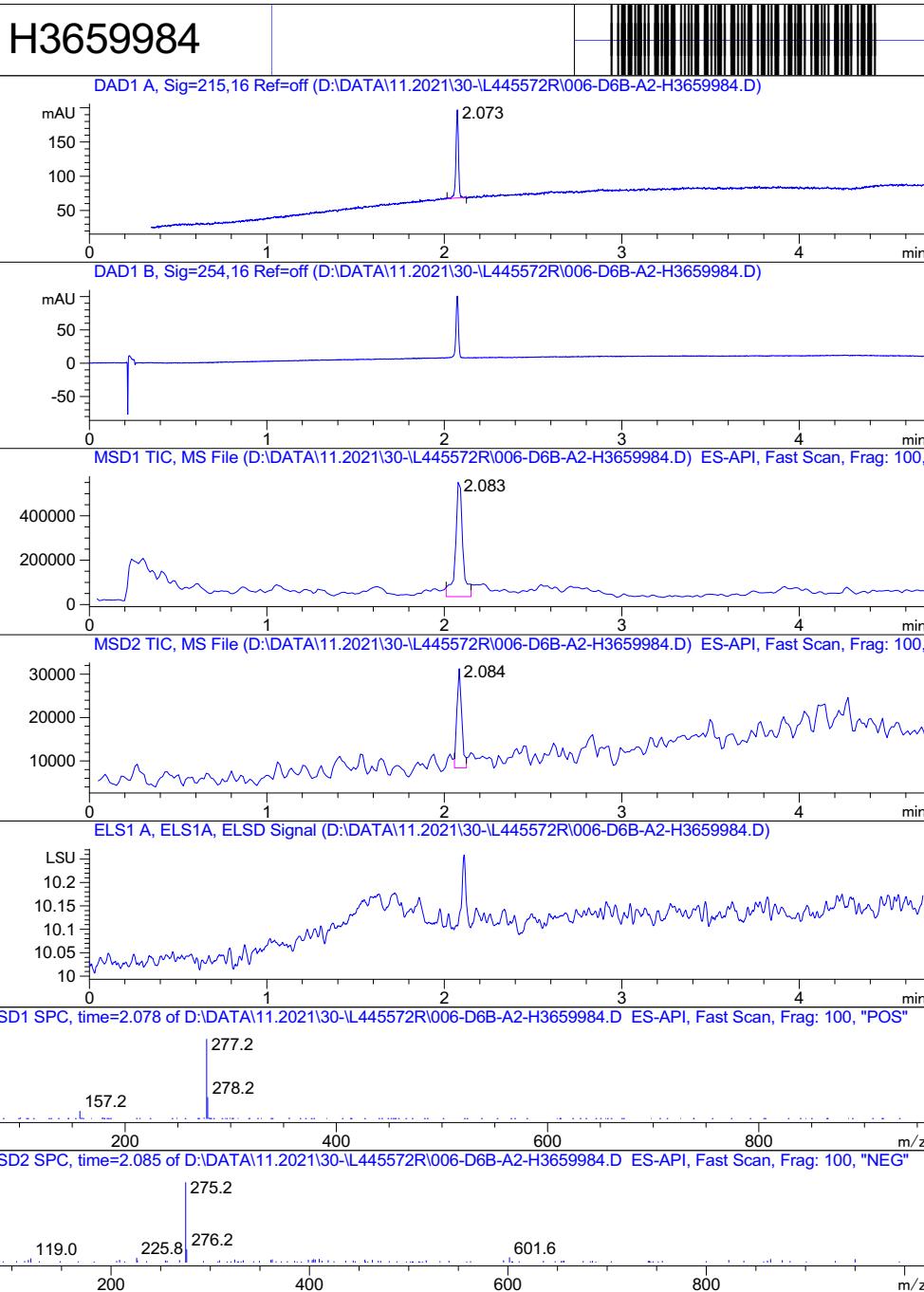
Z638927484_

MaxPeak: 100.00%
Ret_Time: 2.073 min



Mol Wt 276.24
Exact Mass 276.08
Time Area%

1 2.073 100.00



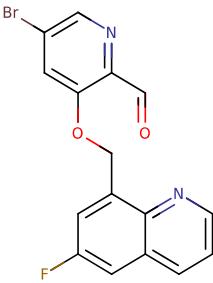
Inj.Date 11/30/2021

CH <invalid>

Acq. Method C:\Users\ -> ->

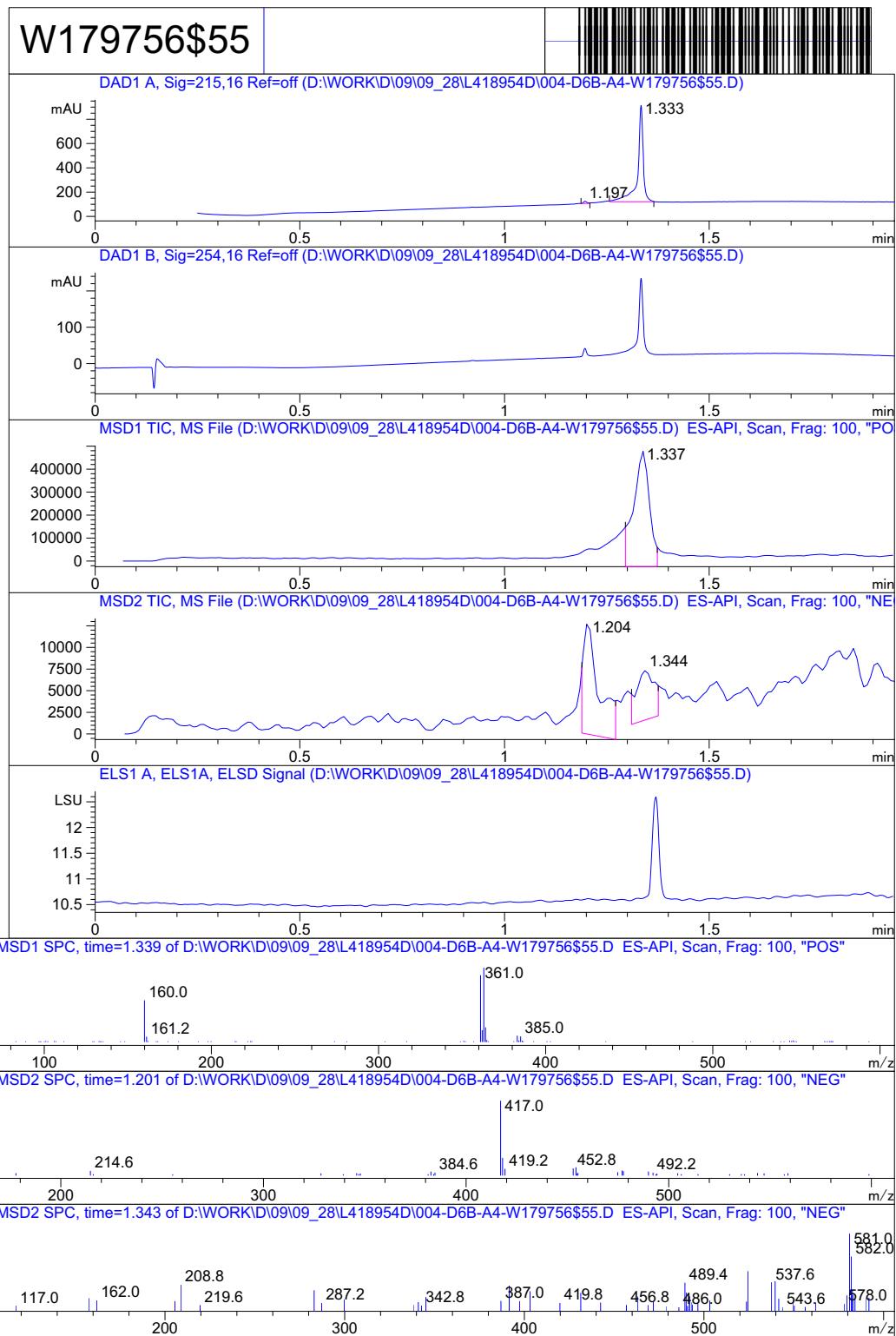
Z5420738300_

MaxPeak: 98.62%
Ret_Time: 1.333 min



Mol Wt 361.16
Exact Mass 360
Time Area%

#	Time	Area%
1	1.197	1.38
2	1.333	98.62



Inj.Date 9/28/2021

K

<invalid> -15-

Acq. Method C:\Chem32\ -> ->

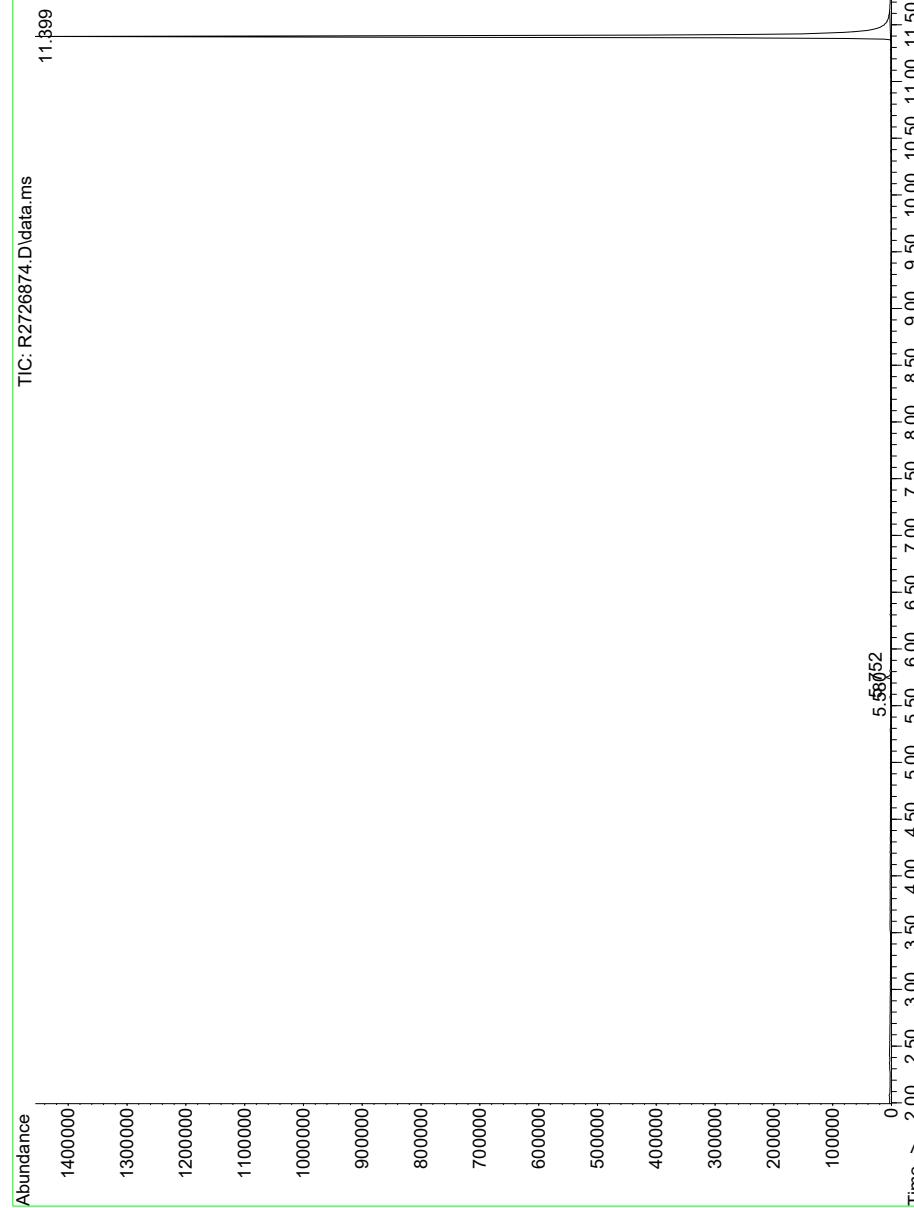
Z5192779144_

Library Search Report

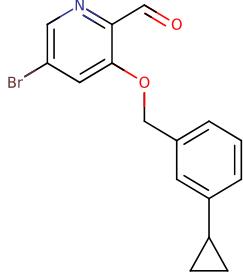
Data Path : D:\MassHunter\GCMS\1\data\09_22\
Data File : R2726874.D
Acq On : 22 Sep 2021 15:10
Operator :
Sample : R2726874
Misc : CH3CN
ALS Vial : 77 Sample Multiplier: 1

Search Libraries: C:\Database\EMPTY.L Minimum Quality: 0

Unknown Spectrum: Apex
Integration Events: ChemStation Integrator - autoint1.e

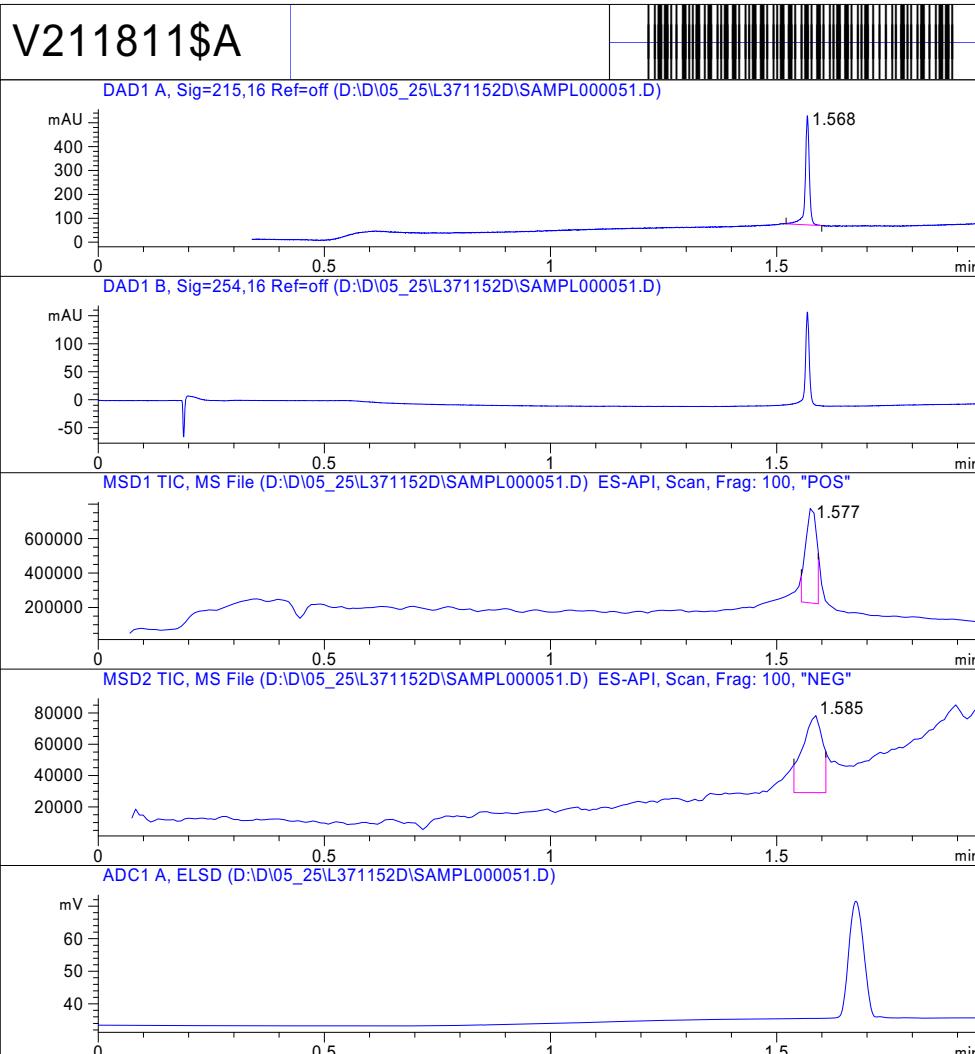


MaxPeak: 100.00%
Ret_Time: 1.568 min

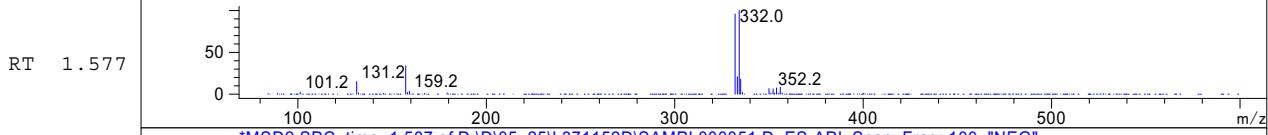


Mol Wt 332.19
Exact Mass 331.04
Time Area%

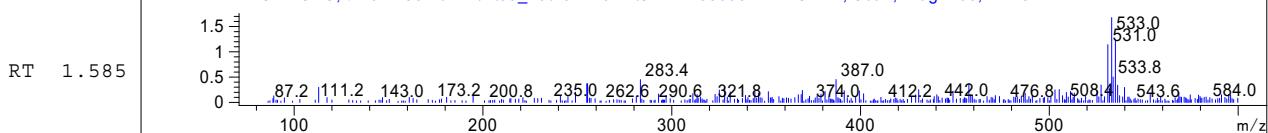
1 1.568 100.00



*MSD1 SPC, time=1.574 of D:\D\05_25\L371152D\SAMPL000051.D ES-API, Scan, Frag: 100, "POS"



*MSD2 SPC, time=1.587 of D:\D\05_25\L371152D\SAMPL000051.D ES-API, Scan, Frag: 100, "NEG"



Inj.Date 5/23/2021

N

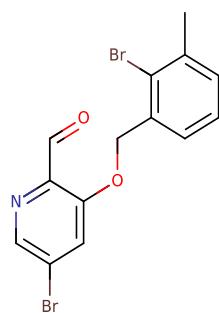
- 5 -

Acq. Method C:\CHEM32\ ->

->

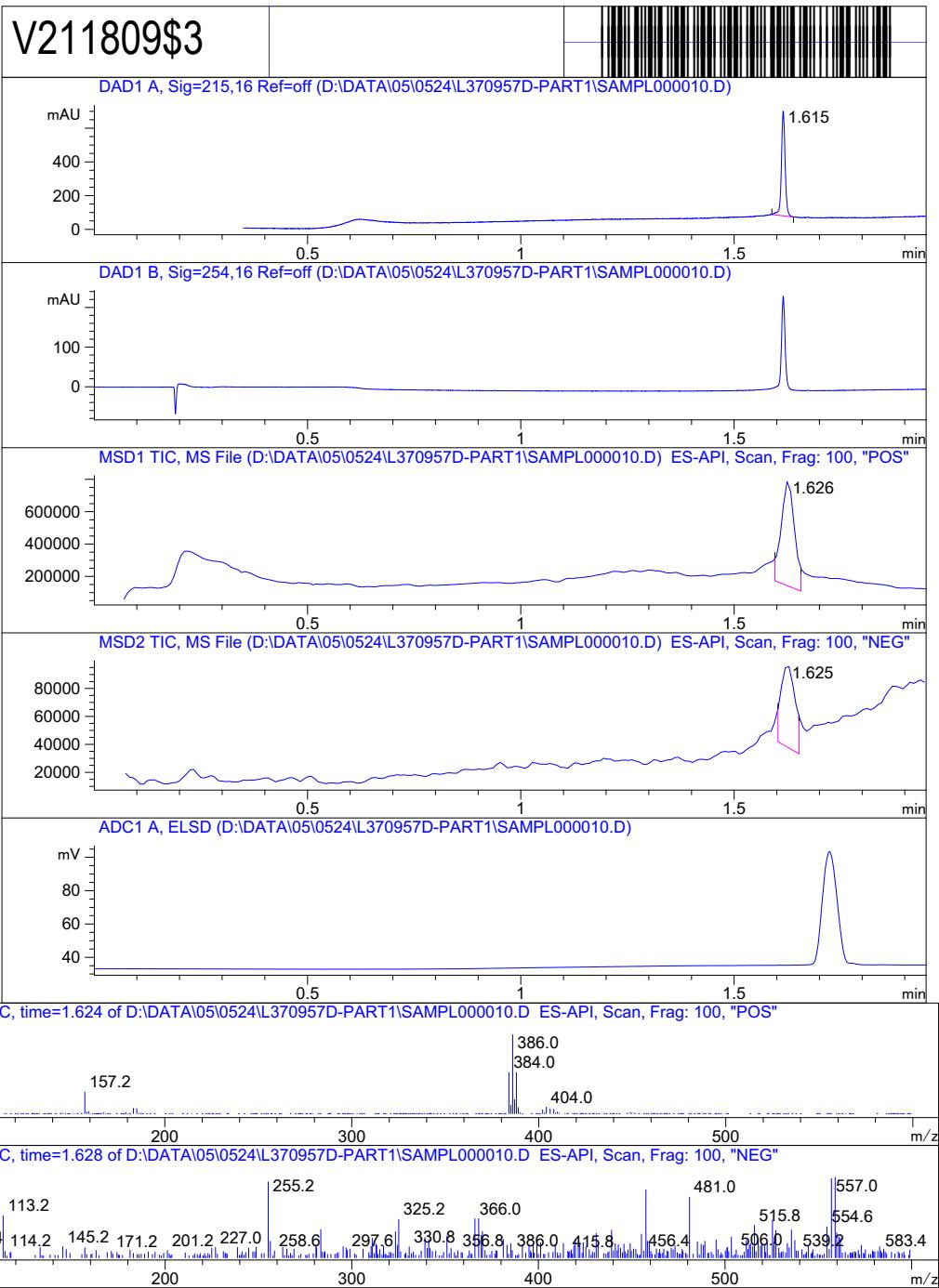
Z4989203264_

MaxPeak: 100.00%
Ret_Time: 1.615 min



Mol Wt 385.05
Exact Mass 384.93
Time Area%

1 1.615 100.00



Inj.Date 5/23/2021

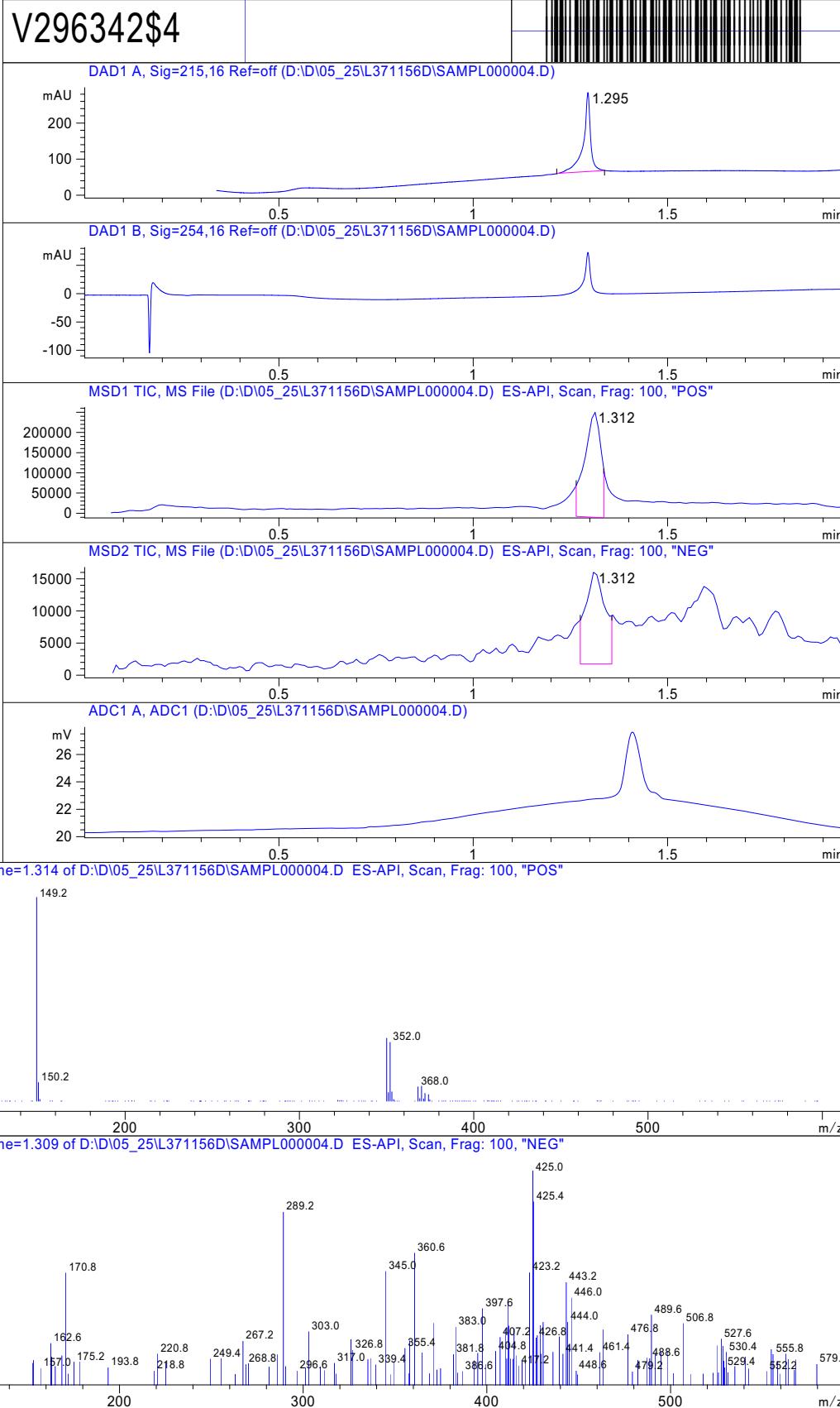
L/T

- 5 -

Acq. Method C:\CHEM32\ -> ->

Z4989203259_

MaxPeak: 100.00%
Ret_Time: 1.295 min



Inj.Date 5/23/2021

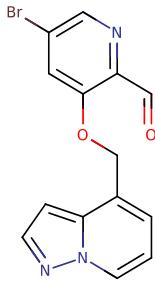
N

- 4 -

Acq. Method C:\CHEM32\->->

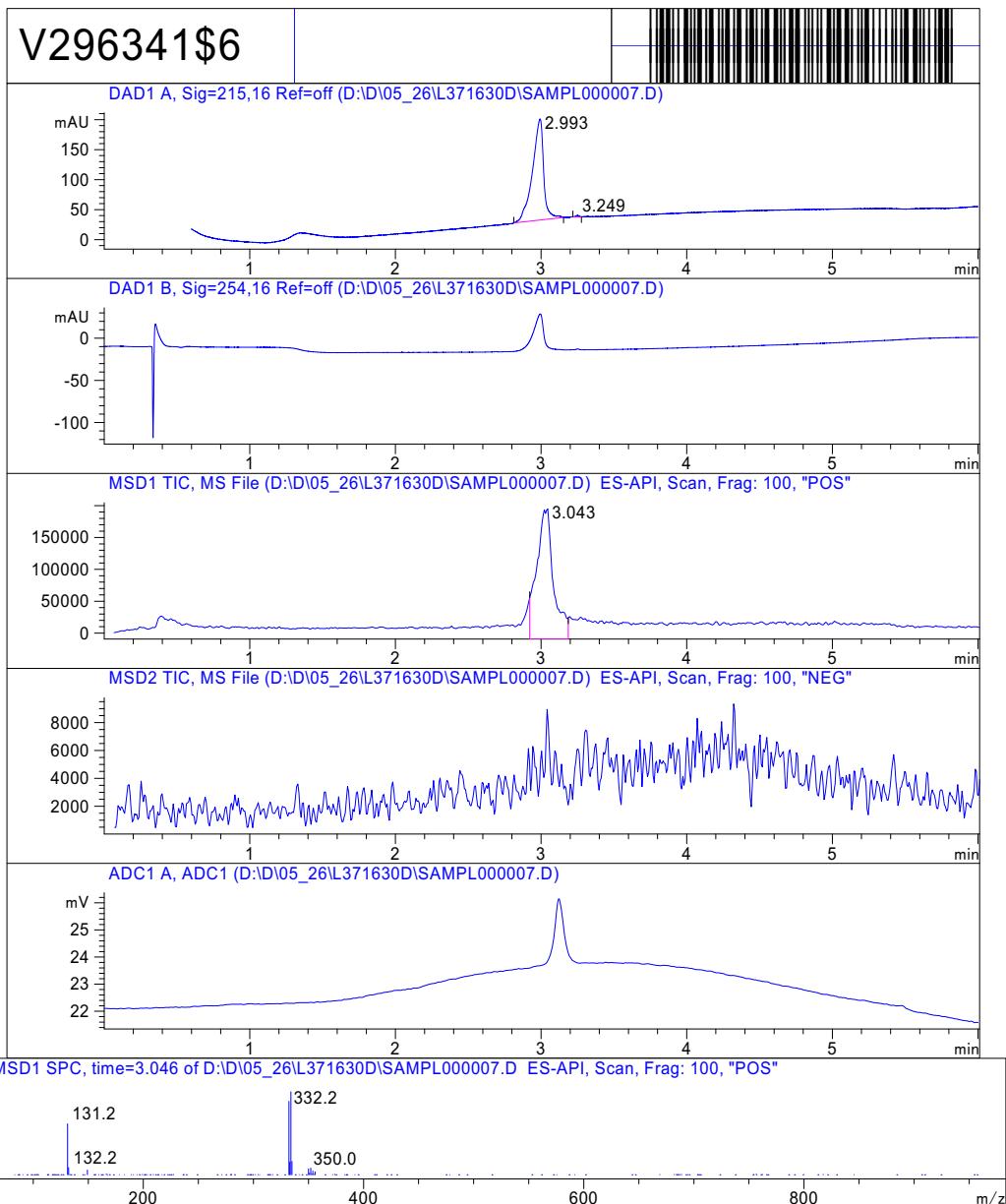
Z4989203255_

MaxPeak: 99.47%
Ret_Time: 2.993 min



Mol Wt 332.15
Exact Mass 331
Time Area%

1 2.993 99.47
2 3.249 0.53



Inj.Date 5/26/2021

N

- 4 - Acq. Method C:\CHEM32\-> ->

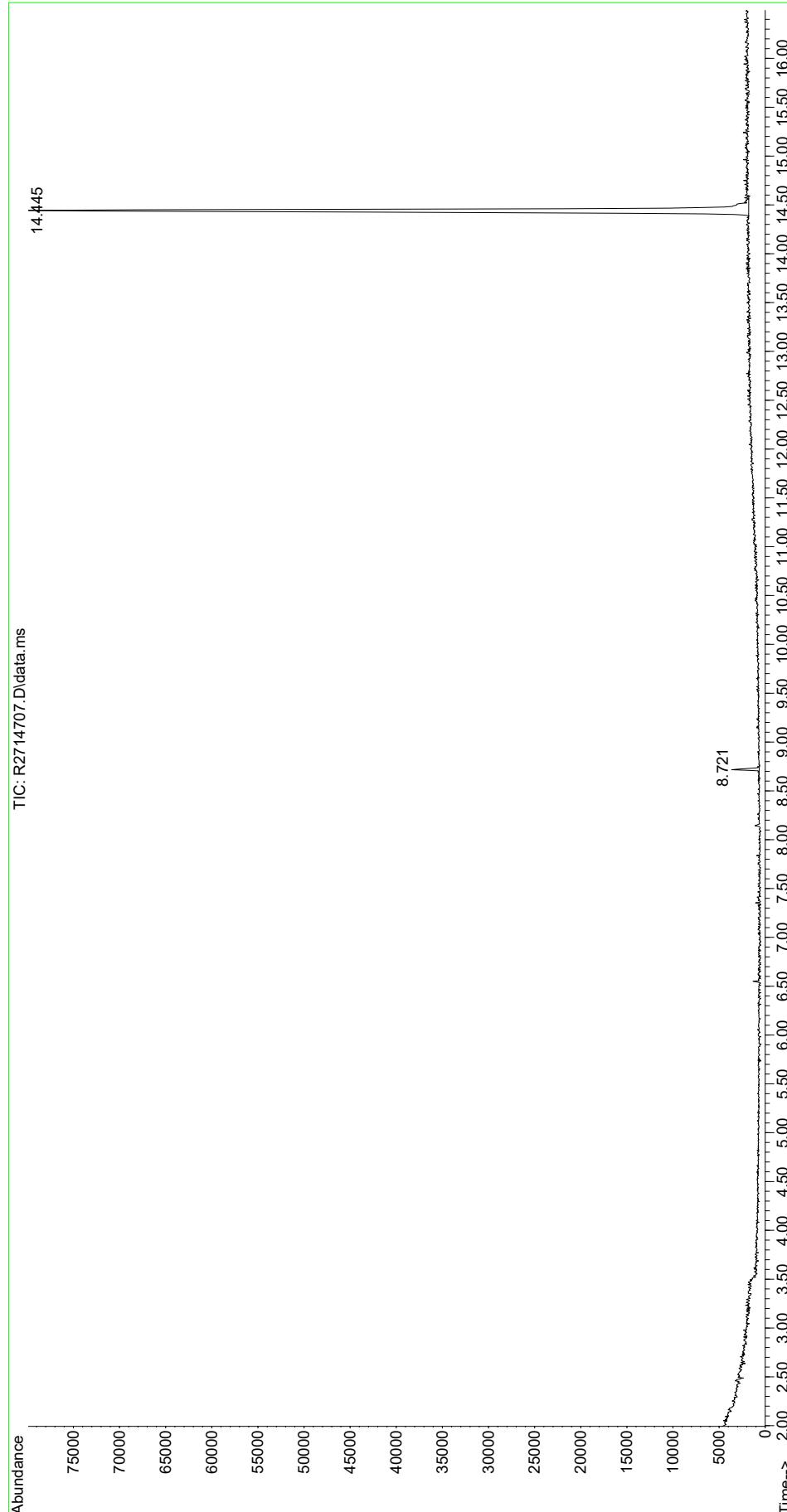
Z4989203254_

Library Search Report

Data Path : D:\MassHunter\GCMS\1\data\09_09\
Data File : R2714707.D
Acq On : 09 Sep 2021 17:49
Operator :
Sample : R2714707
Misc : CH3CN
ALS Vial : 126 Sample Multiplier: 1

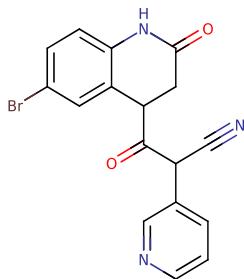
Search Libraries: C:\Database\EMPTY.L Minimum Quality: 0

Unknown Spectrum: Apex
Integration Events: ChemStation Integrator - autoint1.e



Z4954569231_

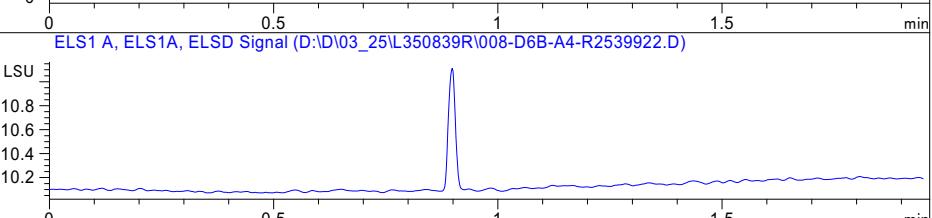
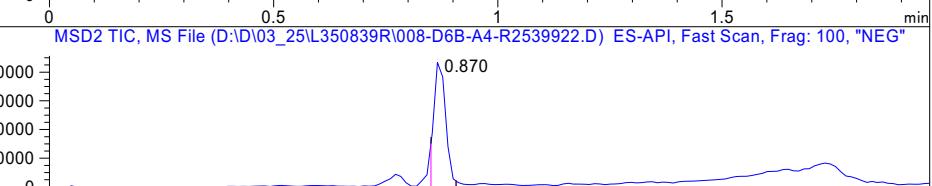
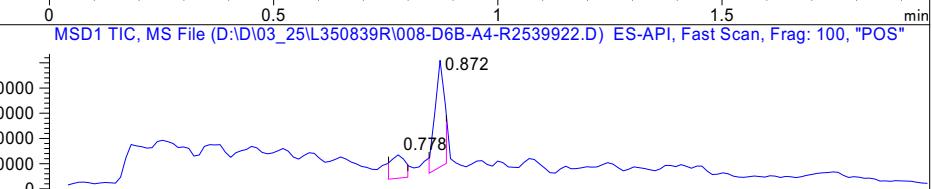
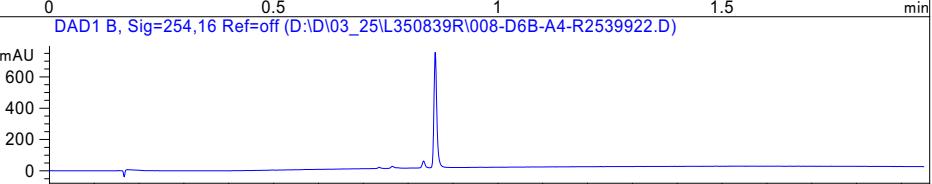
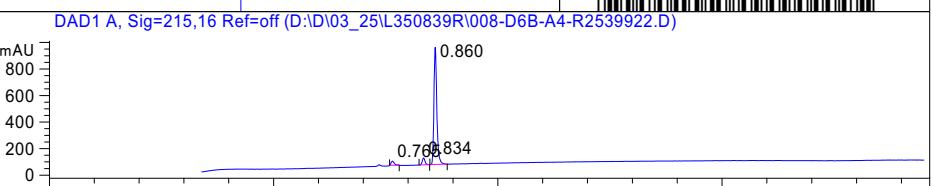
MaxPeak: 91.30%
Ret_Time: 0.860 min



Mol Wt 370.2
Exact Mass 369.02
Time Area%

1 0.765 3.46
2 0.834 5.24
3 0.860 91.30

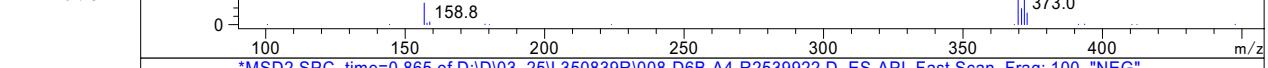
R2539922



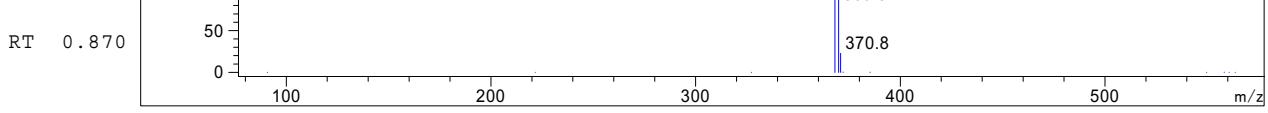
*MSD1 SPC, time=0.778 of D:\D\03_25\1350839R\008-D6B-A4-R2539922.D ES-API, Fast Scan, Frag: 100, "POS"



*MSD1 SPC, time=0.871 of D:\D\03_25\1350839R\008-D6B-A4-R2539922.D ES-API, Fast Scan, Frag: 100, "POS"



*MSD2 SPC, time=0.865 of D:\D\03_25\1350839R\008-D6B-A4-R2539922.D ES-API, Fast Scan, Frag: 100, "NEG"



Inj.Date 3/25/2021

N

Acq. Method C:\Users\ -> ->

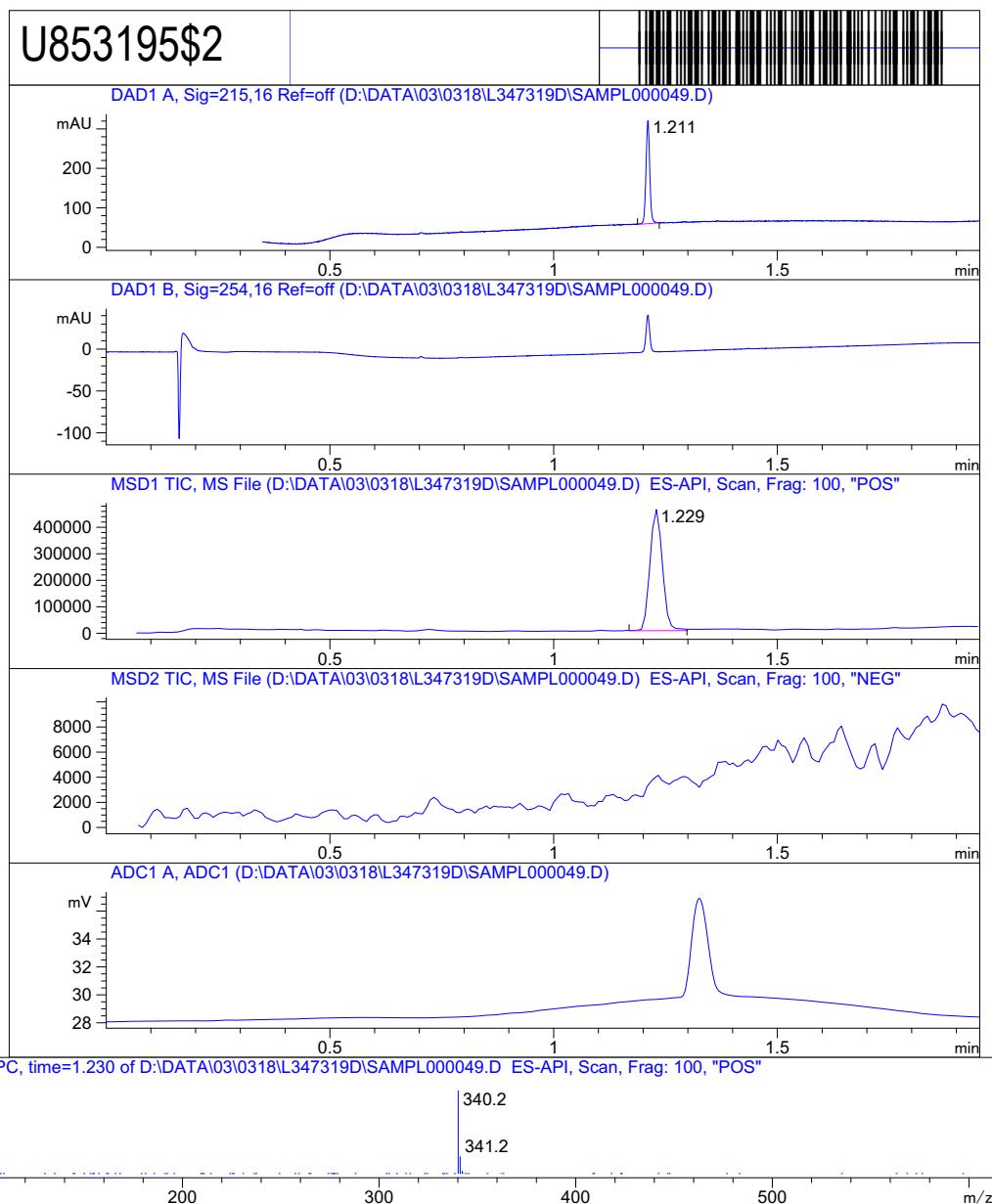
Z4934489646_

MaxPeak: 100.00%
Ret_Time: 1.211 min



Mol Wt 339.36
Exact Mass 339.16
Time Area%

1 1.211 100.00



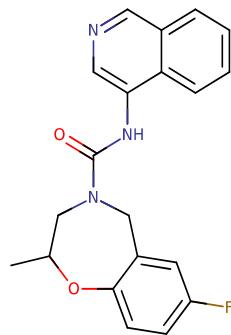
Inj.Date 3/18/2021

L/T

- 4 - Acq. Method C:\CHEM32\ -> ->

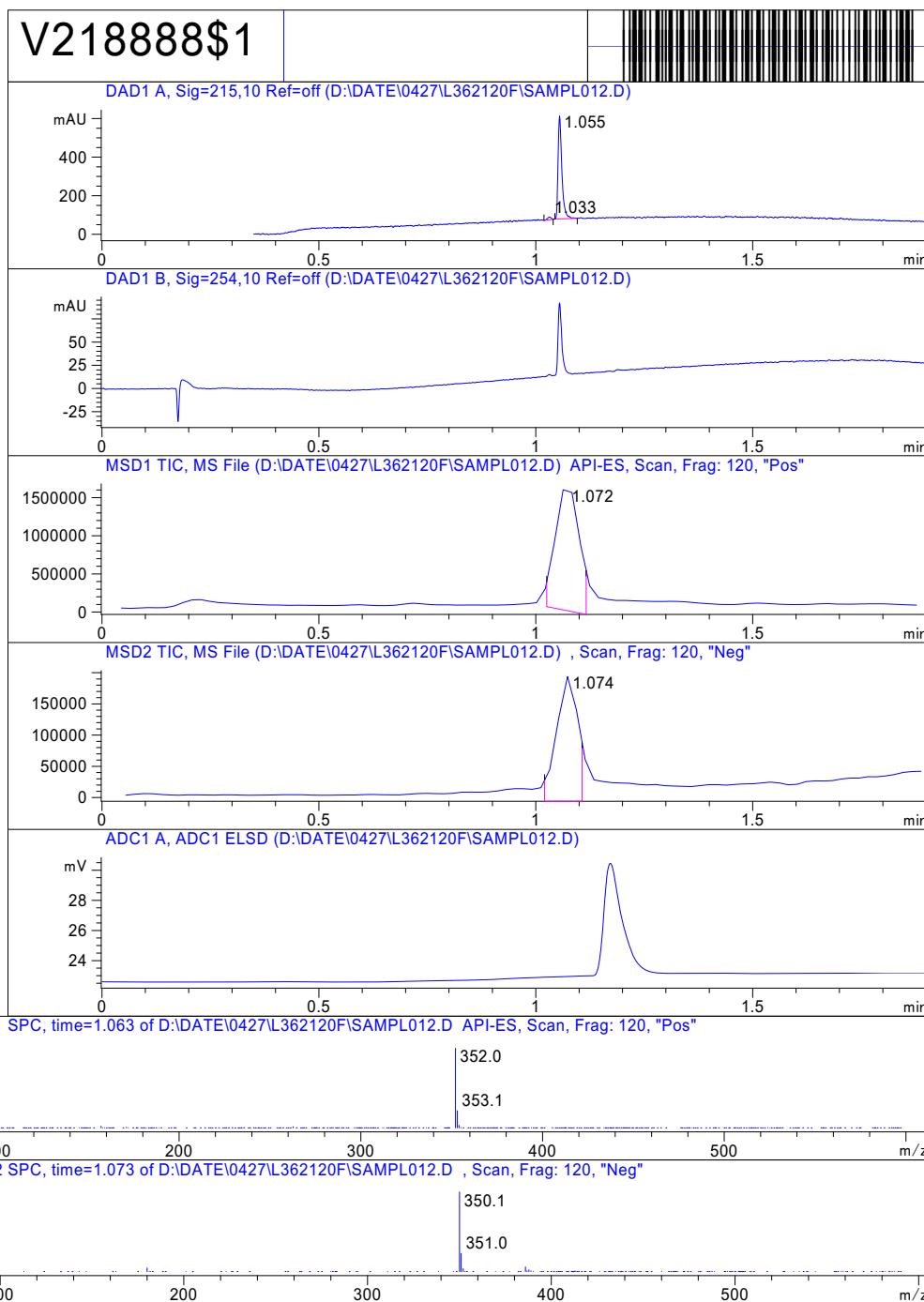
Z4929616328_

MaxPeak: 97.64%
Ret_Time: 1.055 min



Mol Wt 351.37
Exact Mass 351.16
Time Area%

1 1.033 2.36
2 1.055 97.64



Inj.Date 4/27/2021

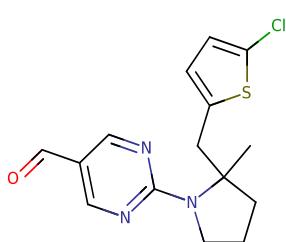
E

-VL-

Acq. Method C:\HPCHEM\ -> ->

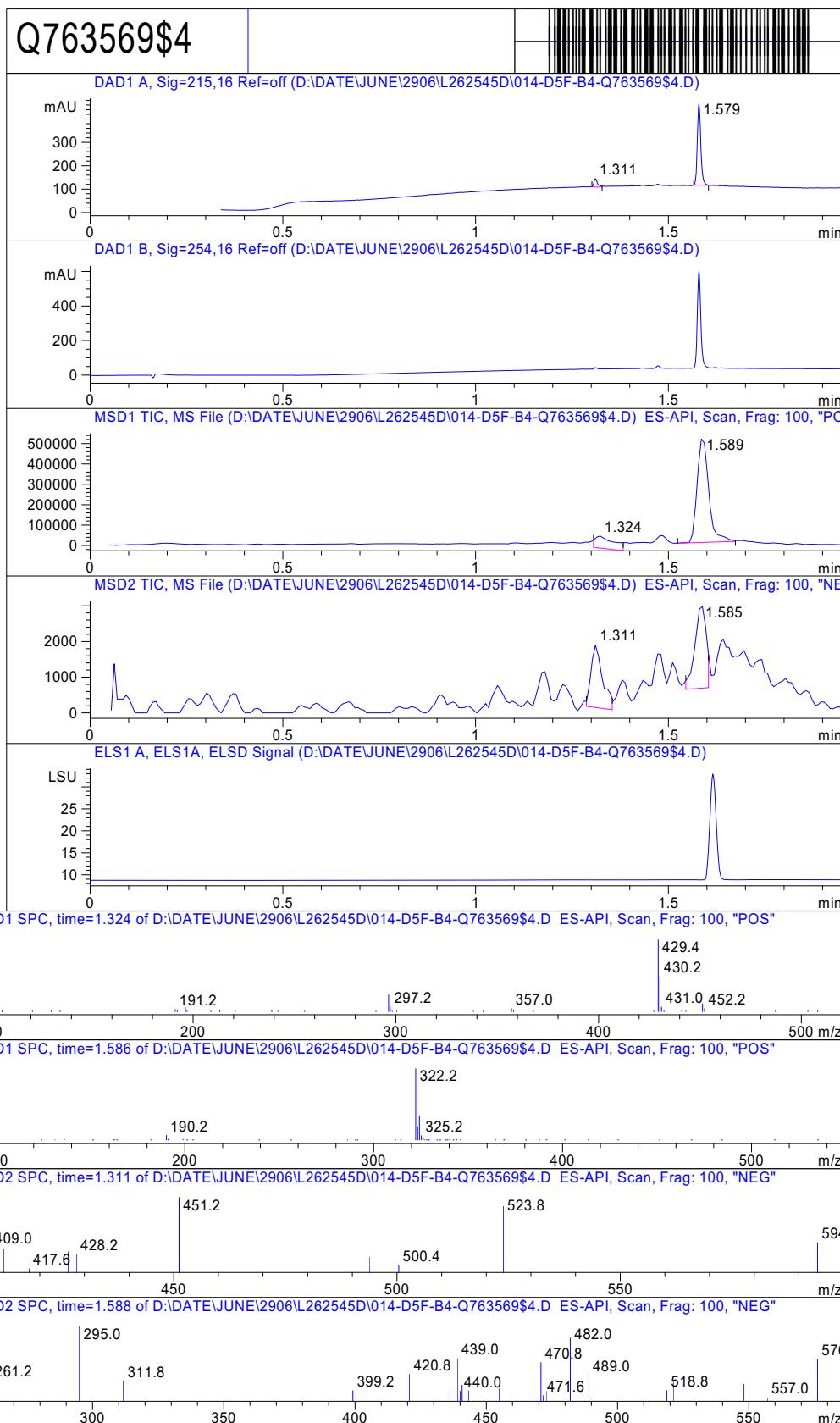
Z4924562400_

MaxPeak: 90.44%
Ret_Time: 1.579 min



Mol Wt 321.82
Exact Mass 321.09
Time Area%

1 1.311 9.56
2 1.579 90.44



Inj.Date 6/29/2020

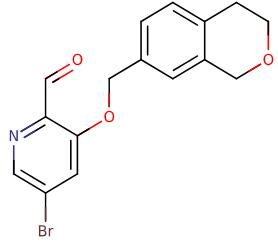
Y

-15-

Acq. Method C:\Chem32\ -> ->

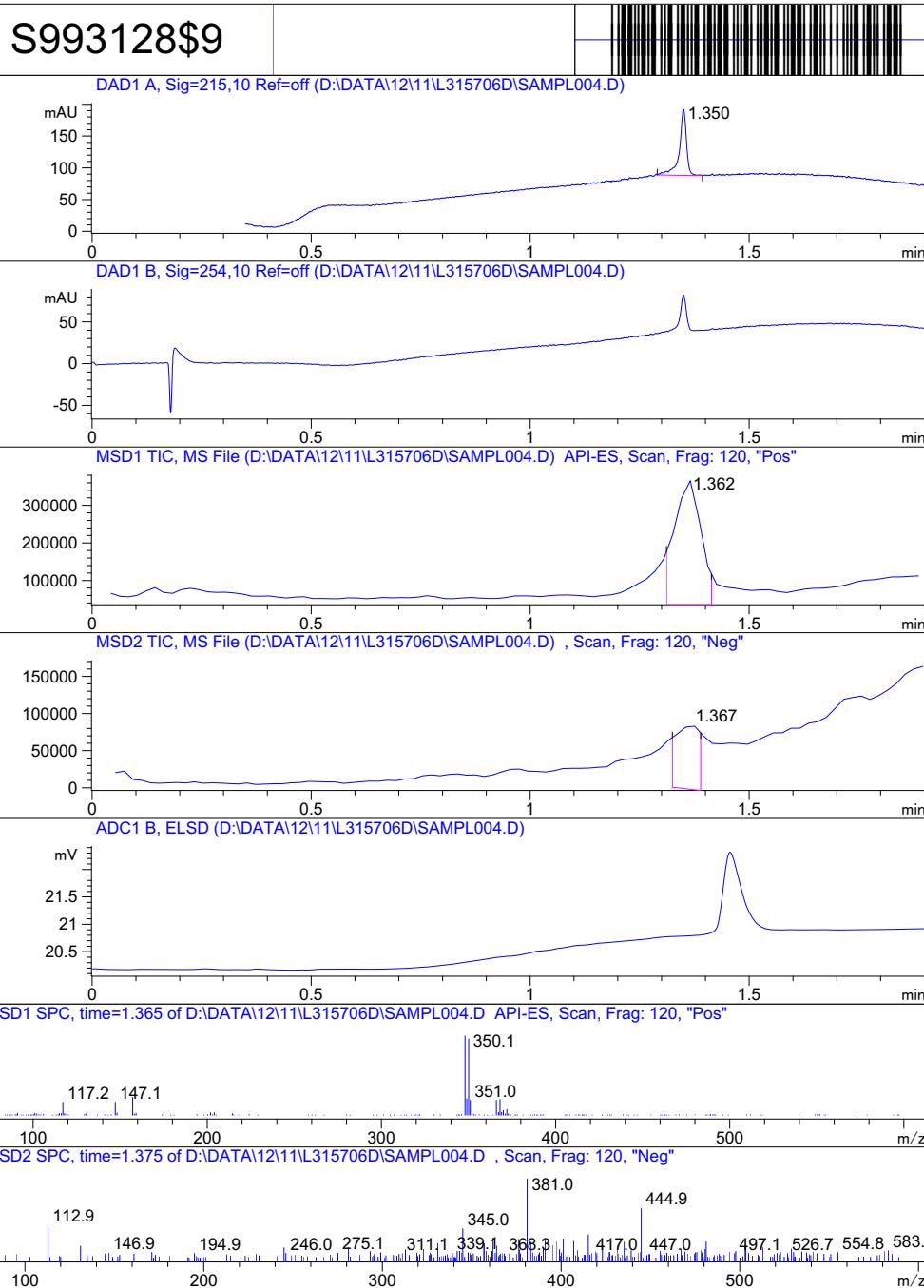
Z4497434898_

MaxPeak: 100.00%
Ret_Time: 1.350 min



Mol Wt 348.19
Exact Mass 347.03
Time Area%

1 1.350 100.00



Inj.Date 12/11/2020

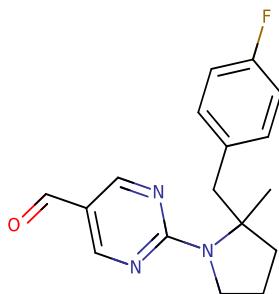
LB

-SL-

Acq. Method C:\HPCHEM\-> ->

Z3339728474_

MaxPeak: 100.00%
Ret_Time: 1.516 min

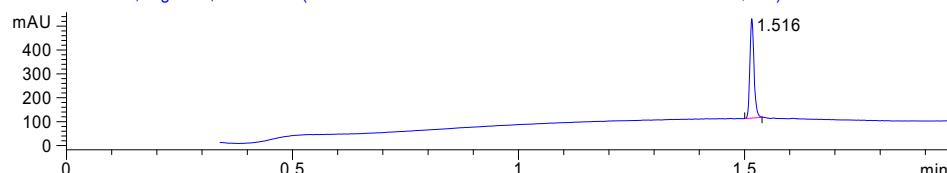


Mol Wt 299.34
Exact Mass 299.17
Time Area%

1 1.516 100.00

Q763545\$1

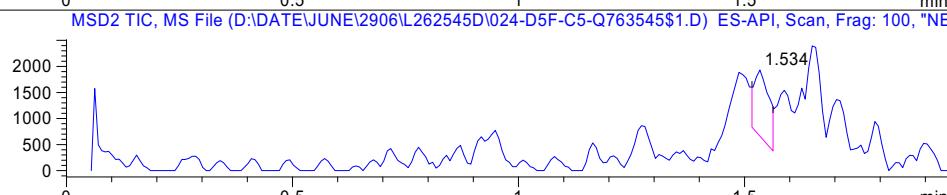
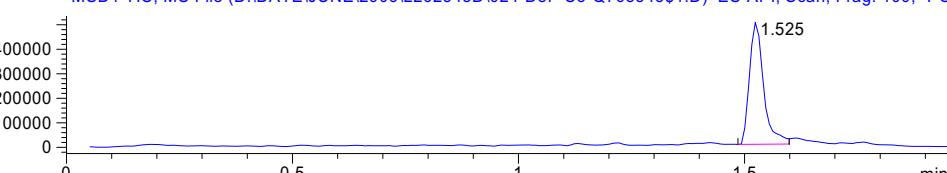
DAD1 A, Sig=215,16 Ref=off (D:\DATE\JUNE\2906\L262545D\024-D5F-C5-Q763545\$1.D)



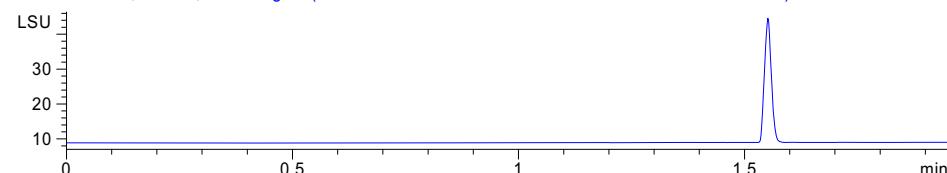
DAD1 B, Sig=254,16 Ref=off (D:\DATE\JUNE\2906\L262545D\024-D5F-C5-Q763545\$1.D)



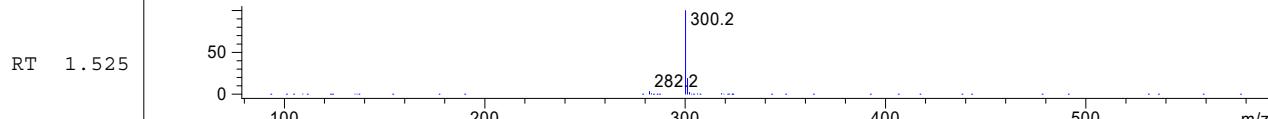
MSD1 TIC, MS File (D:\DATE\JUNE\2906\L262545D\024-D5F-C5-Q763545\$1.D) ES-API, Scan, Frag: 100, "PC"



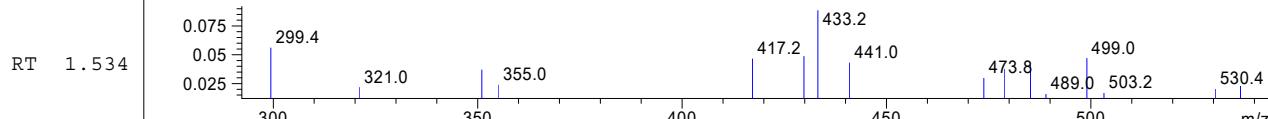
ELS1 A, ELS1A, ELSD Signal (D:\DATE\JUNE\2906\L262545D\024-D5F-C5-Q763545\$1.D)



*MSD1 SPC, time=1.524 of D:\DATE\JUNE\2906\L262545D\024-D5F-C5-Q763545\$1.D ES-API, Scan, Frag: 100, "POS"



*MSD2 SPC, time=1.534 of D:\DATE\JUNE\2906\L262545D\024-D5F-C5-Q763545\$1.D ES-API, Scan, Frag: 100, "NEG"



Inj.Date 6/29/2020

Y

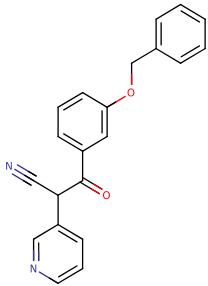
-15 -

Acq. Method C:\Chem32\ ->

->

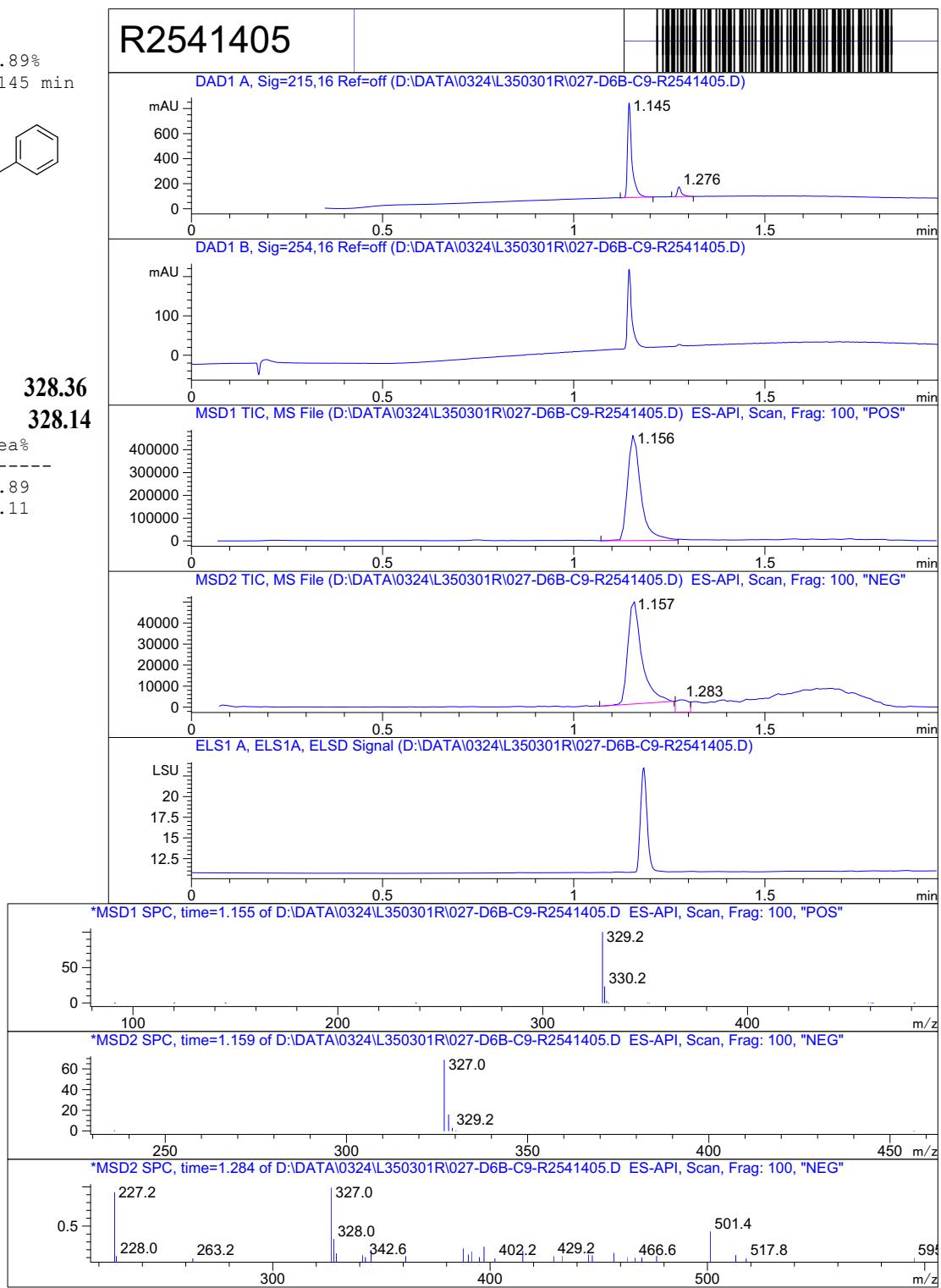
Z2851615440_

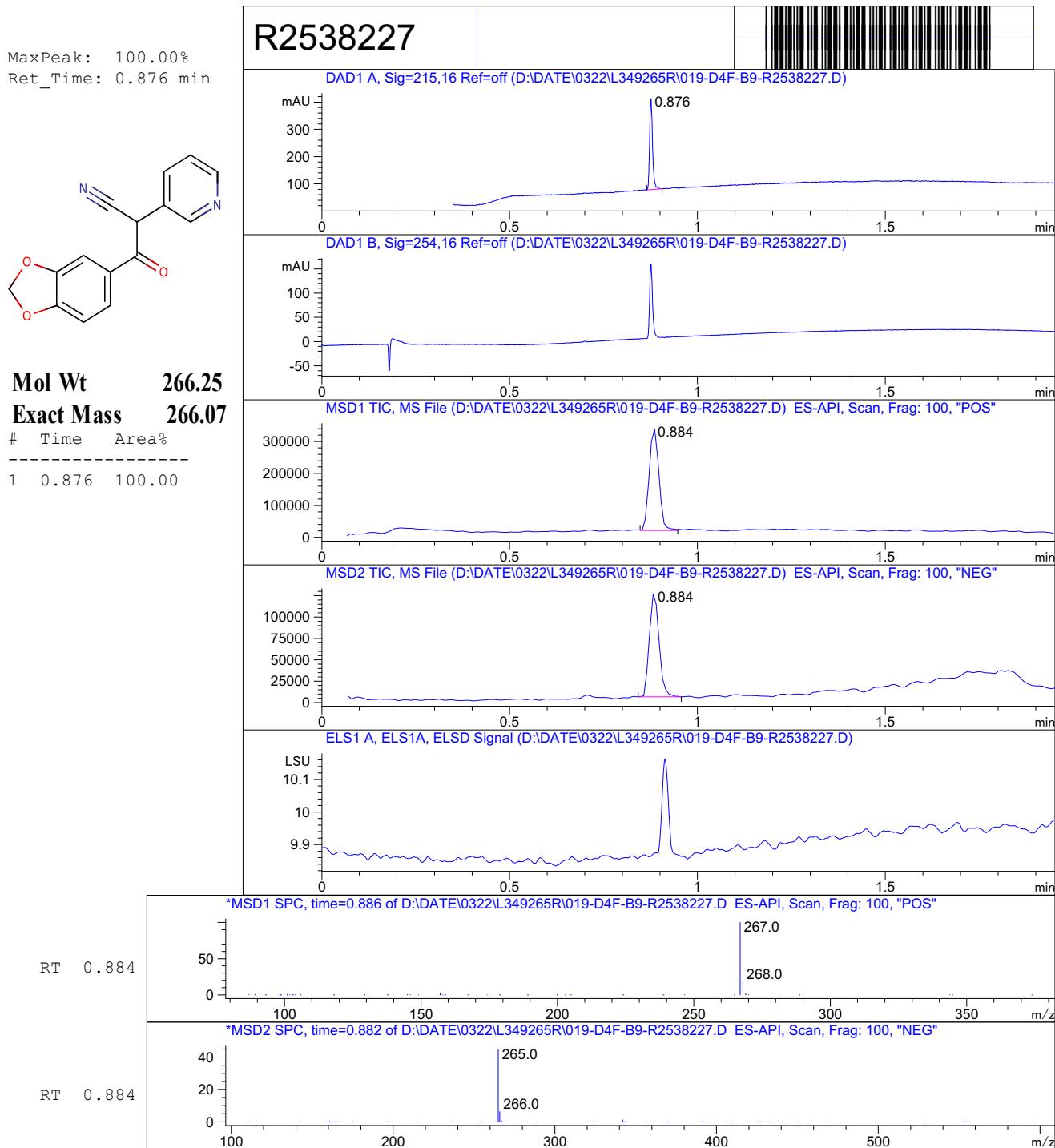
MaxPeak: 90.89%
Ret_Time: 1.145 min



Mol Wt 328.36
Exact Mass 328.14
Time Area%

1 1.145 90.89
2 1.276 9.11





Inj.Date 3/22/2021

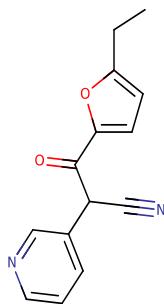
O

-18-

Acq. Method C:\Chem32\-> ->

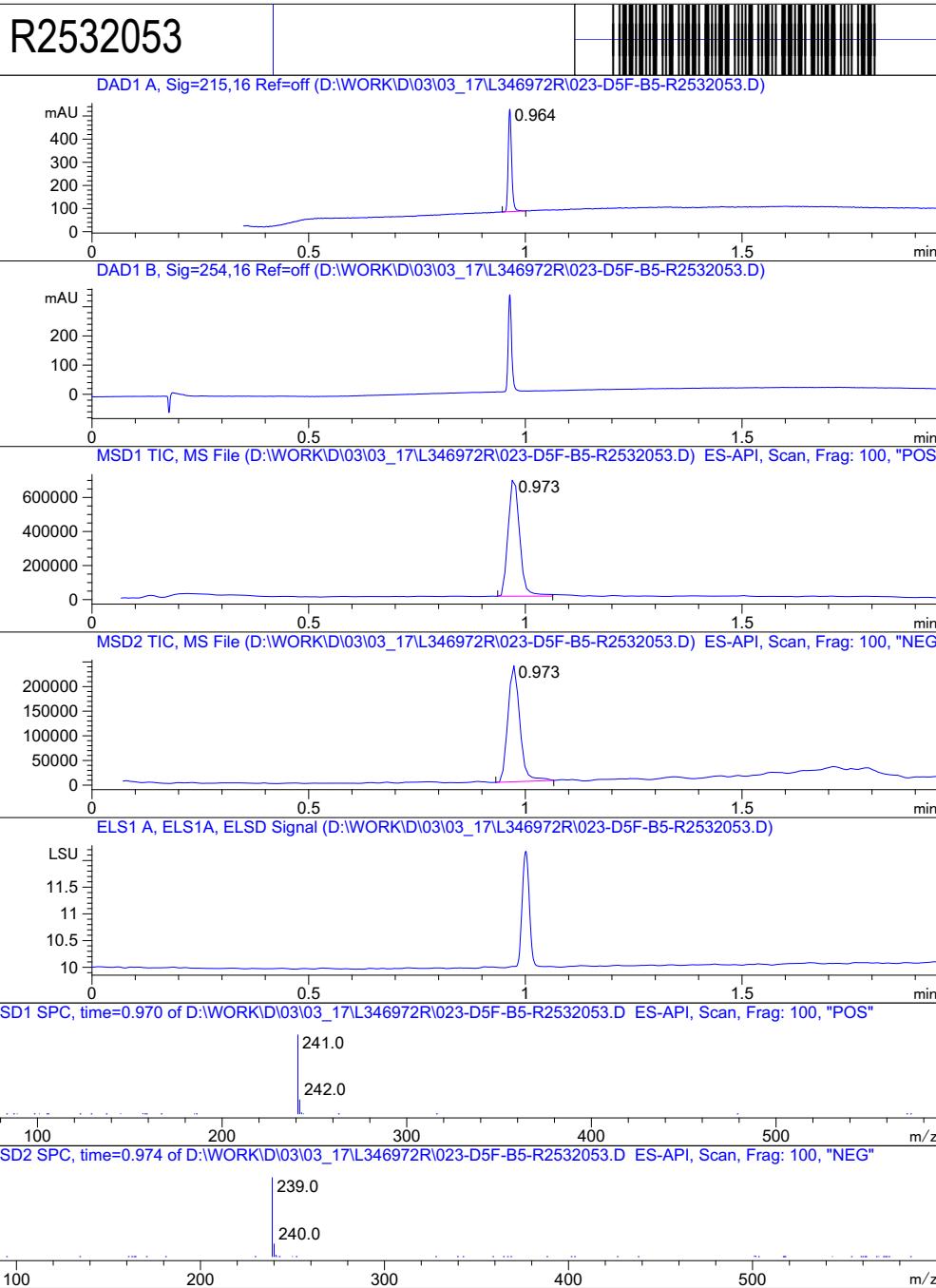
Z1410957869_

MaxPeak: 100.00%
Ret_Time: 0.964 min



Mol Wt 240.26
Exact Mass 240.1
Time Area%

1 0.964 100.00



Inj.Date 3/16/2021

K

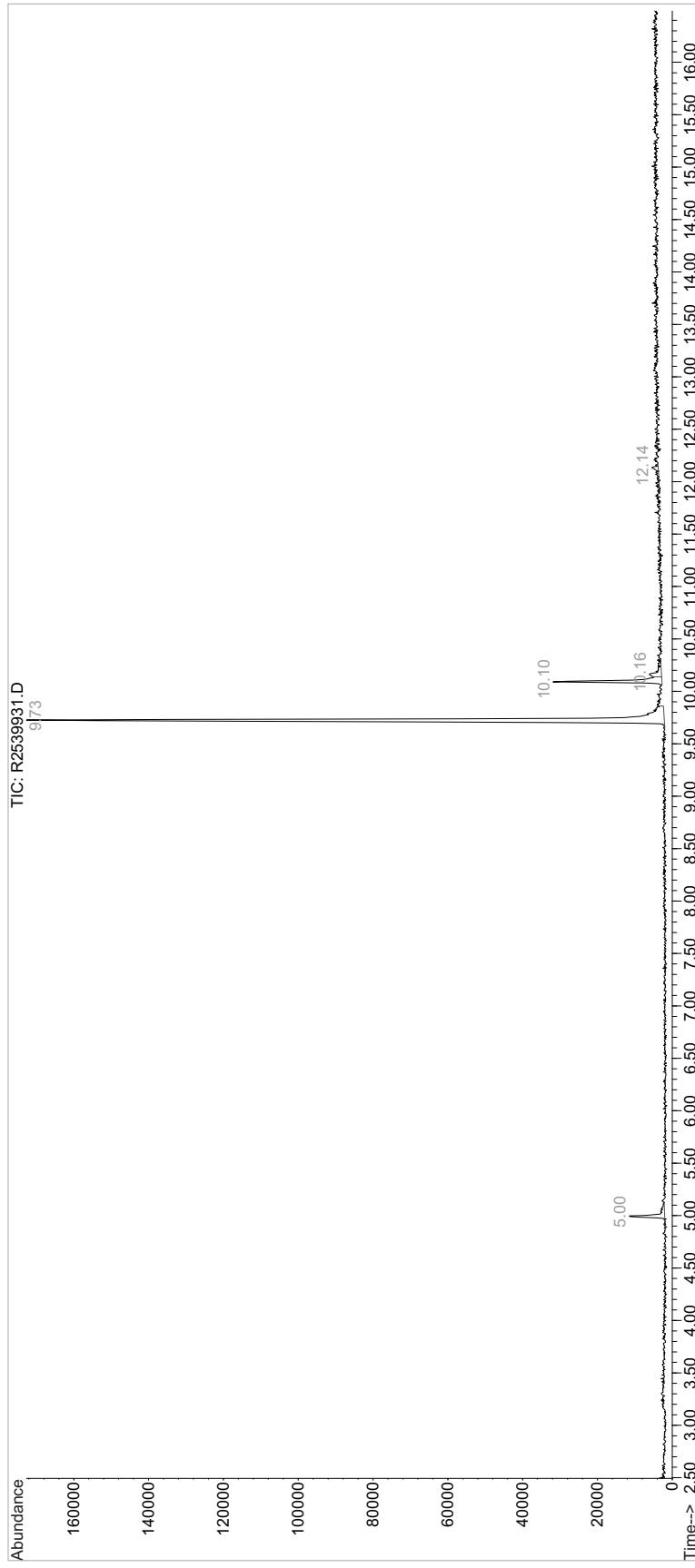
-18-

Acq. Method C:\Chem32\-> ->

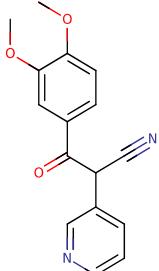
Z1410957765_

Library Search Report

Data File : C:\MSDCHEM\1\DATA\03_23\R2539931.D
Acq On : 24 Mar 2021 4:20
Sample : R2539931
Misc : CH3CN+CH2C12
MS Integration Params: autoint1.e
Method : C:\MSDCHEM\1\METHODS\UNIVERS.M (Chemstation Integrator)
Title :

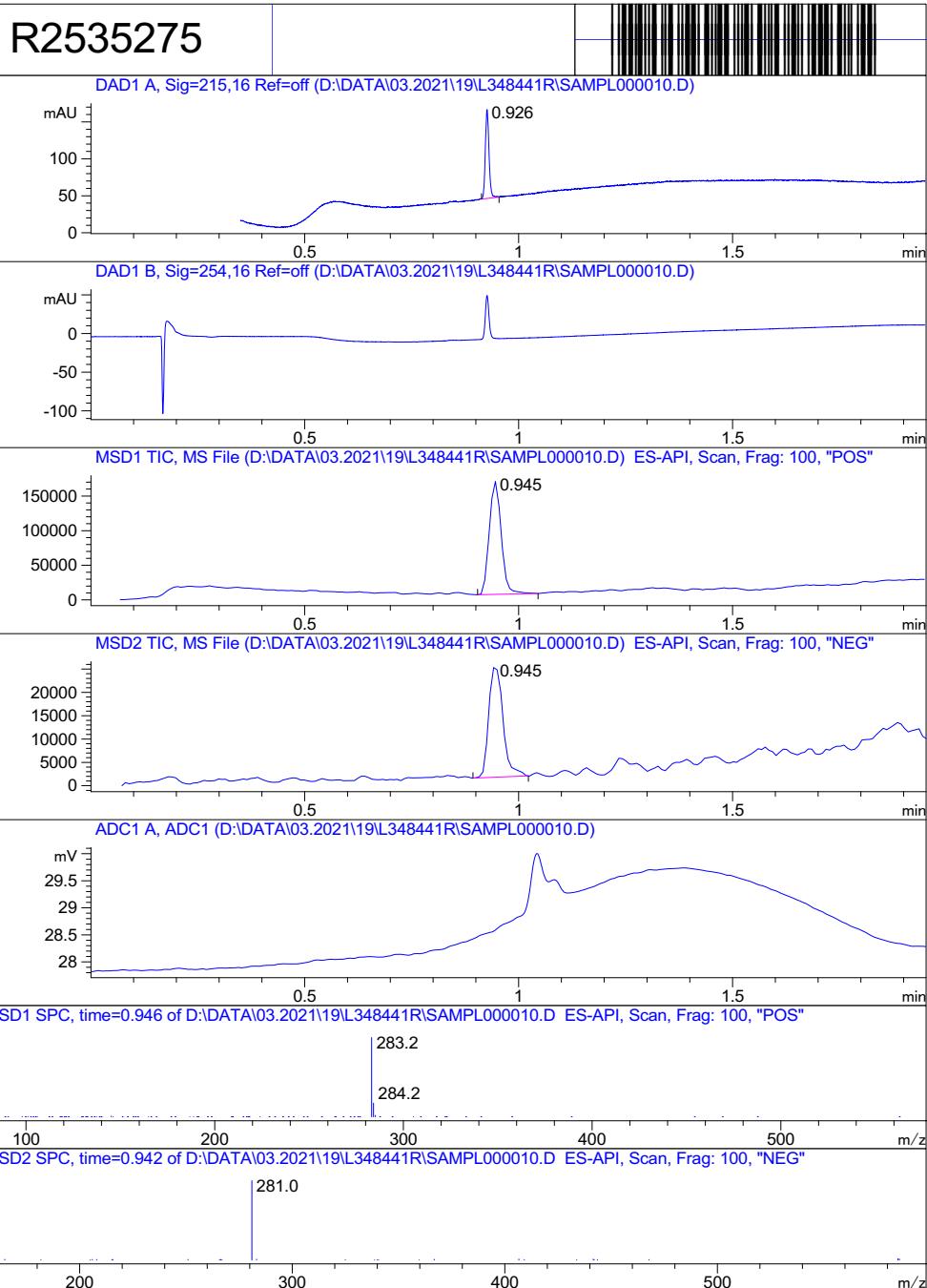


MaxPeak: 100.00%
Ret_Time: 0.926 min



Mol Wt 282.29
Exact Mass 282.11
Time Area%

1 0.926 100.00

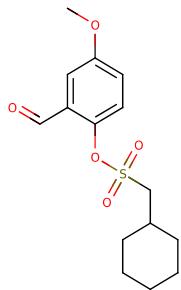


Inj.Date 3/19/2021

CH P2-B-02 - 4 - Acq. Method C:\CHEM32\-> ->

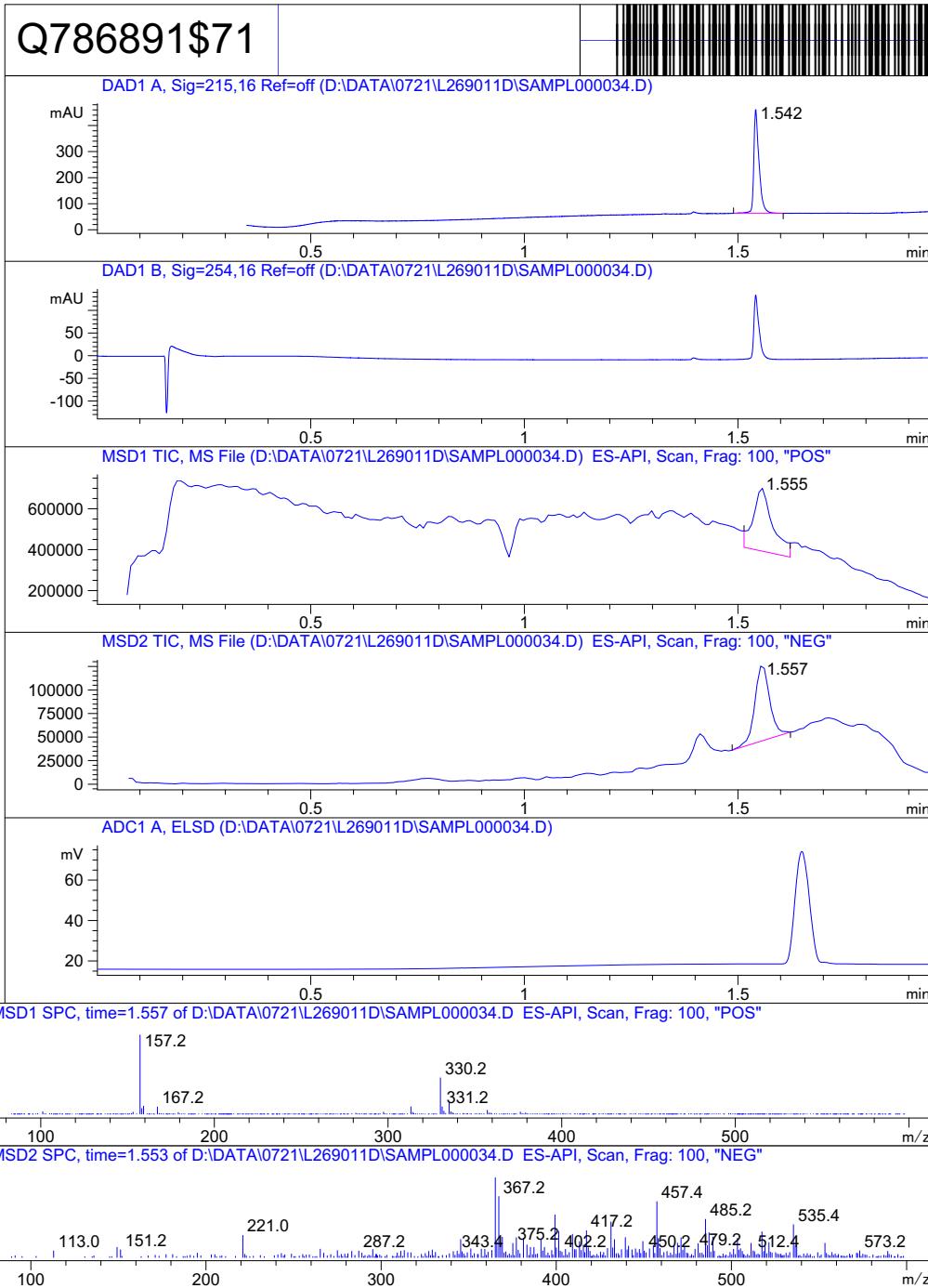
Z1410957725_

MaxPeak: 100.00%
Ret_Time: 1.542 min



Mol Wt 312.38
Exact Mass 312.12
Time Area%

1 1.542 100.00



Inj.Date 7/20/2020

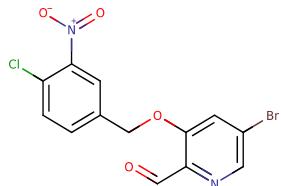
OA

-5-

Acq. Method C:\CHEM32\-> ->

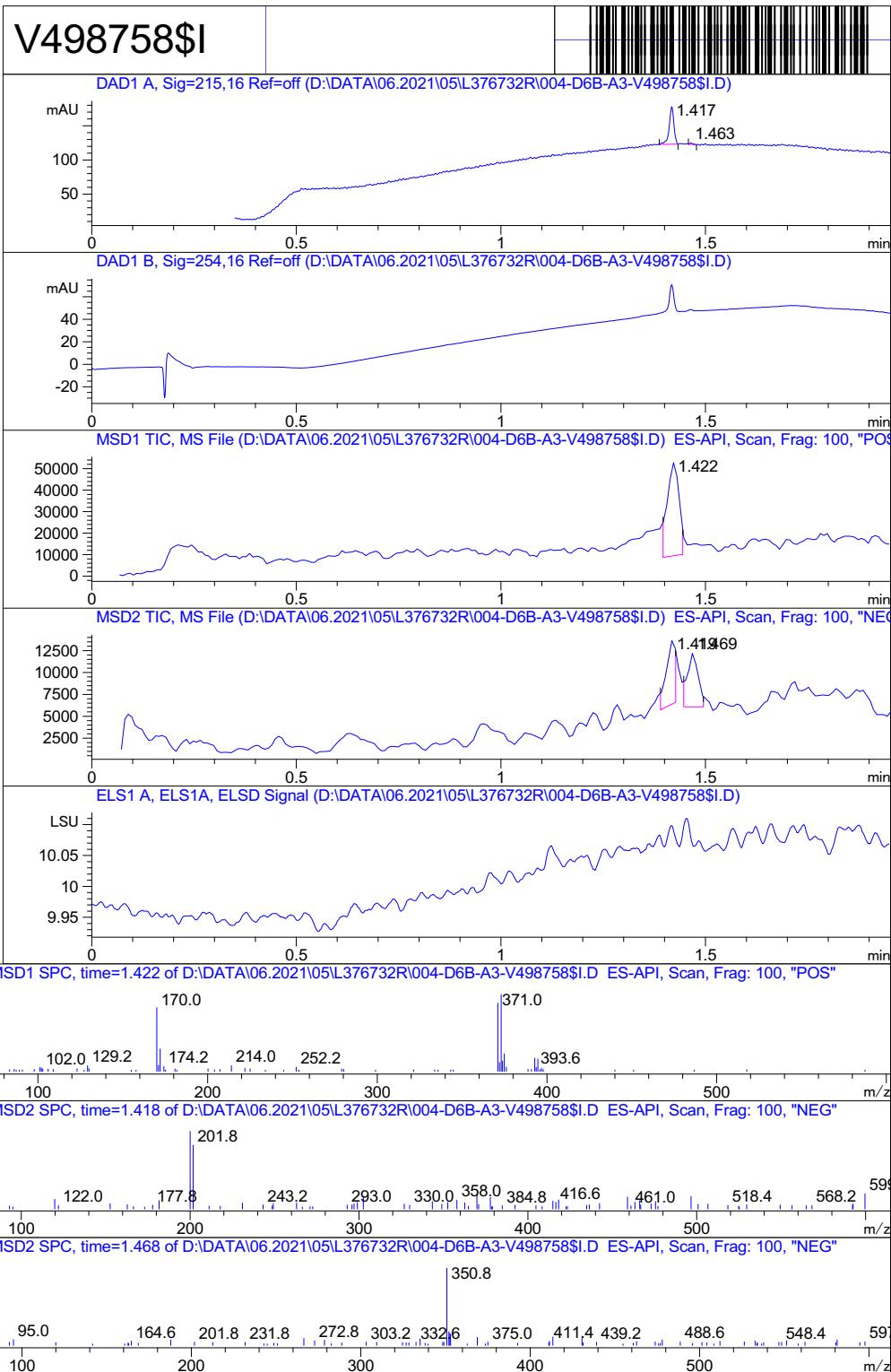
Z1218045697_

MaxPeak: 97.18%
Ret_Time: 1.417 min



Mol Wt 371.57
Exact Mass 371.93
Time Area%

1 1.417 97.18
2 1.463 2.82



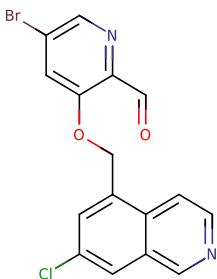
Inj.Date 6/5/2021

CH <invalid> -17-

Acq. Method C:\Chem32\-> ->

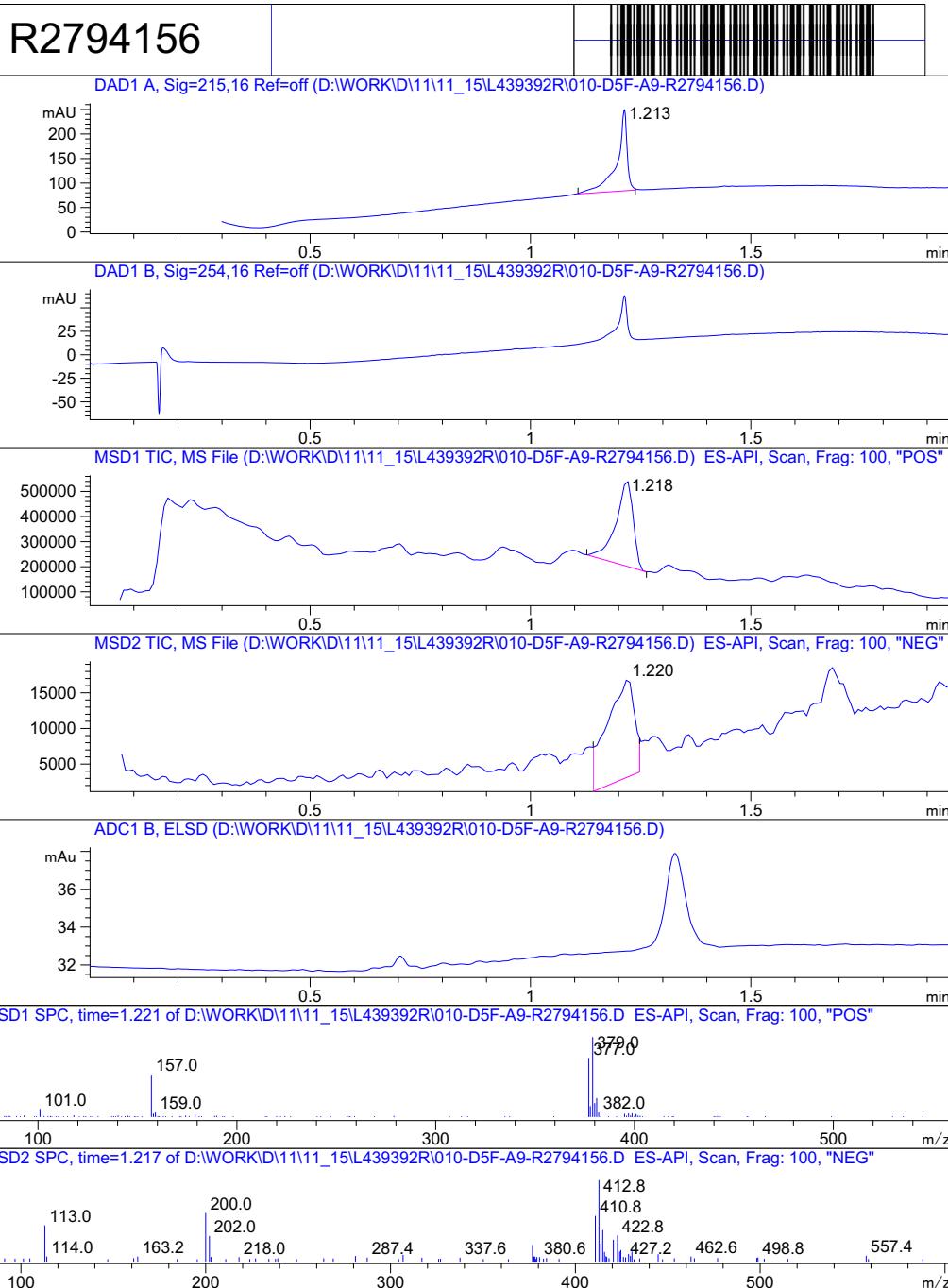
Z4767502618_

MaxPeak: 100.00%
Ret_Time: 1.213 min



Mol Wt 377.62
Exact Mass 377.97
Time Area%

1 1.213 100.00



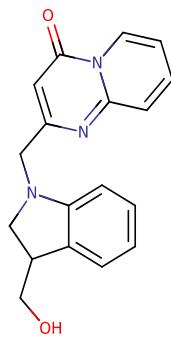
Inj.Date 11/15/2021

K <invalid> -10-

Acq. Method C:\Chem32\-> ->

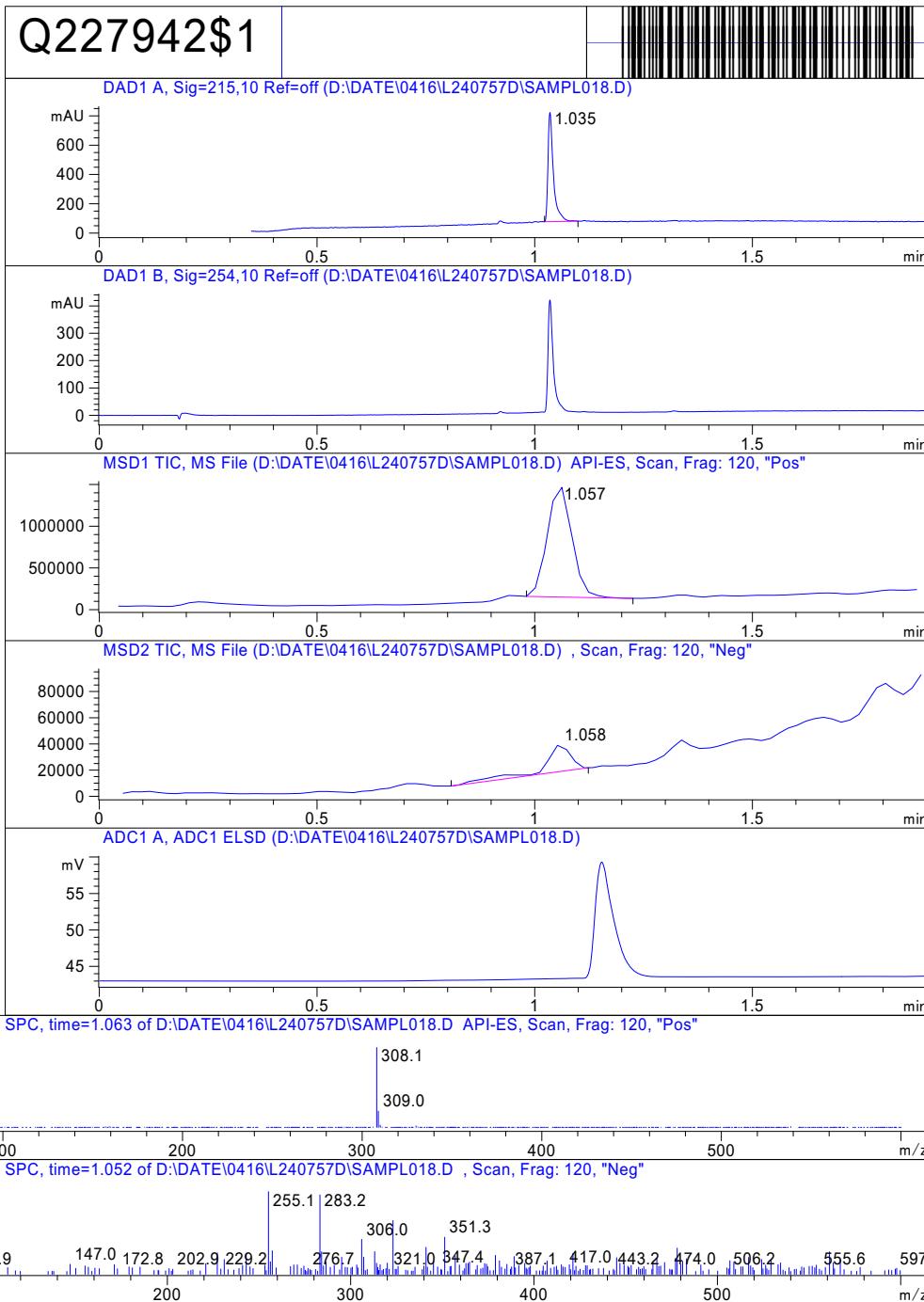
Z5192779138_

MaxPeak: 100.00%
Ret_Time: 1.035 min



Mol Wt 307.35
Exact Mass 307.15
Time Area%

1 1.035 100.00



Inj.Date 4/16/2020

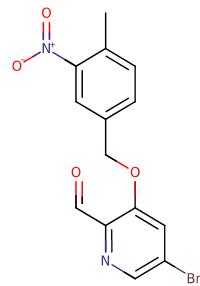
E

-VL-

Acq. Method C:\HPCHEM\ -> ->

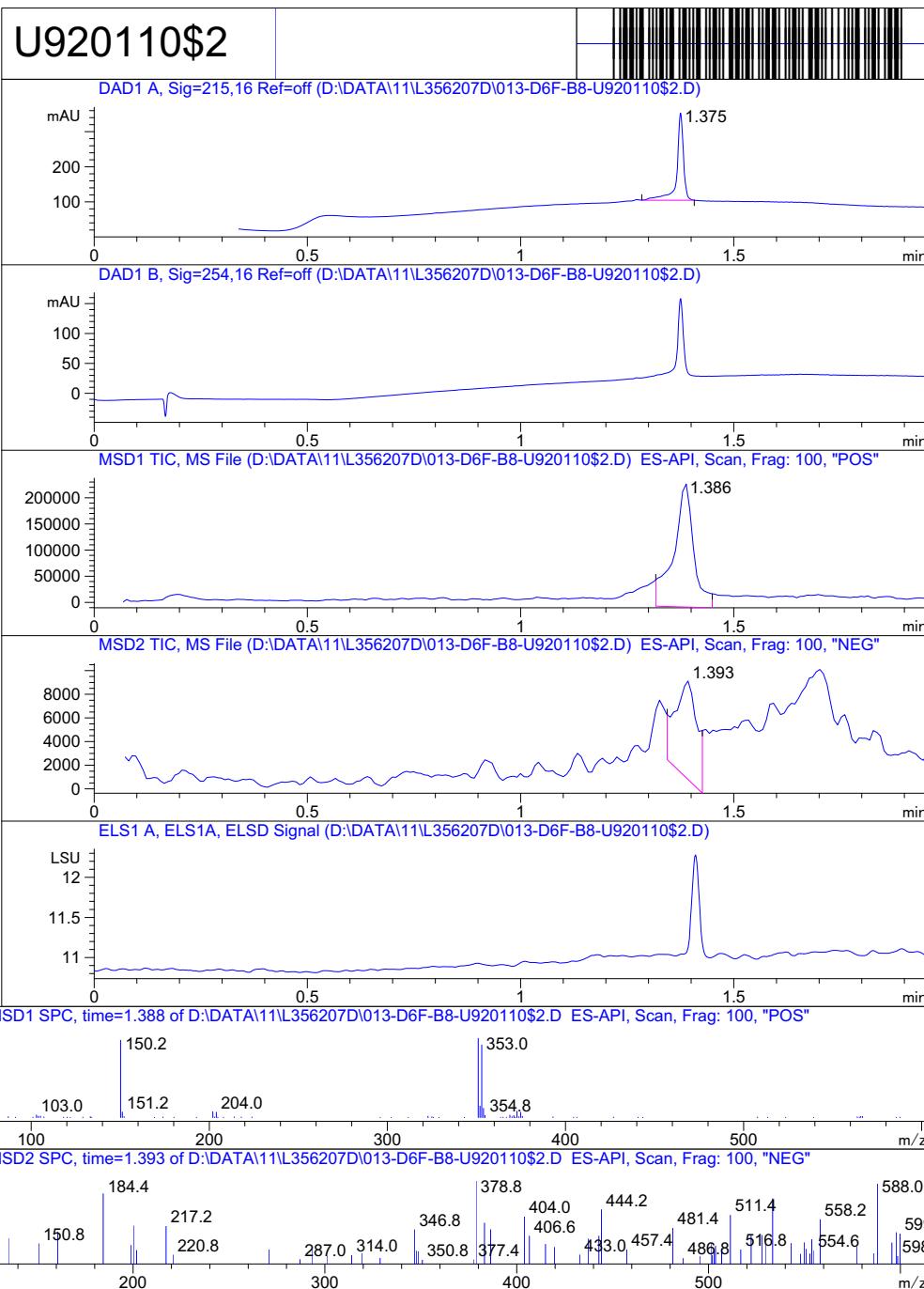
Z2215970681_

MaxPeak: 100.00%
Ret_Time: 1.375 min

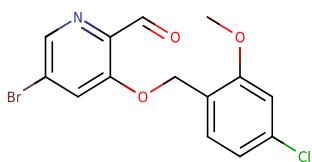


Mol Wt 351.15
Exact Mass 349.99
Time Area%

1 1.375 100.00



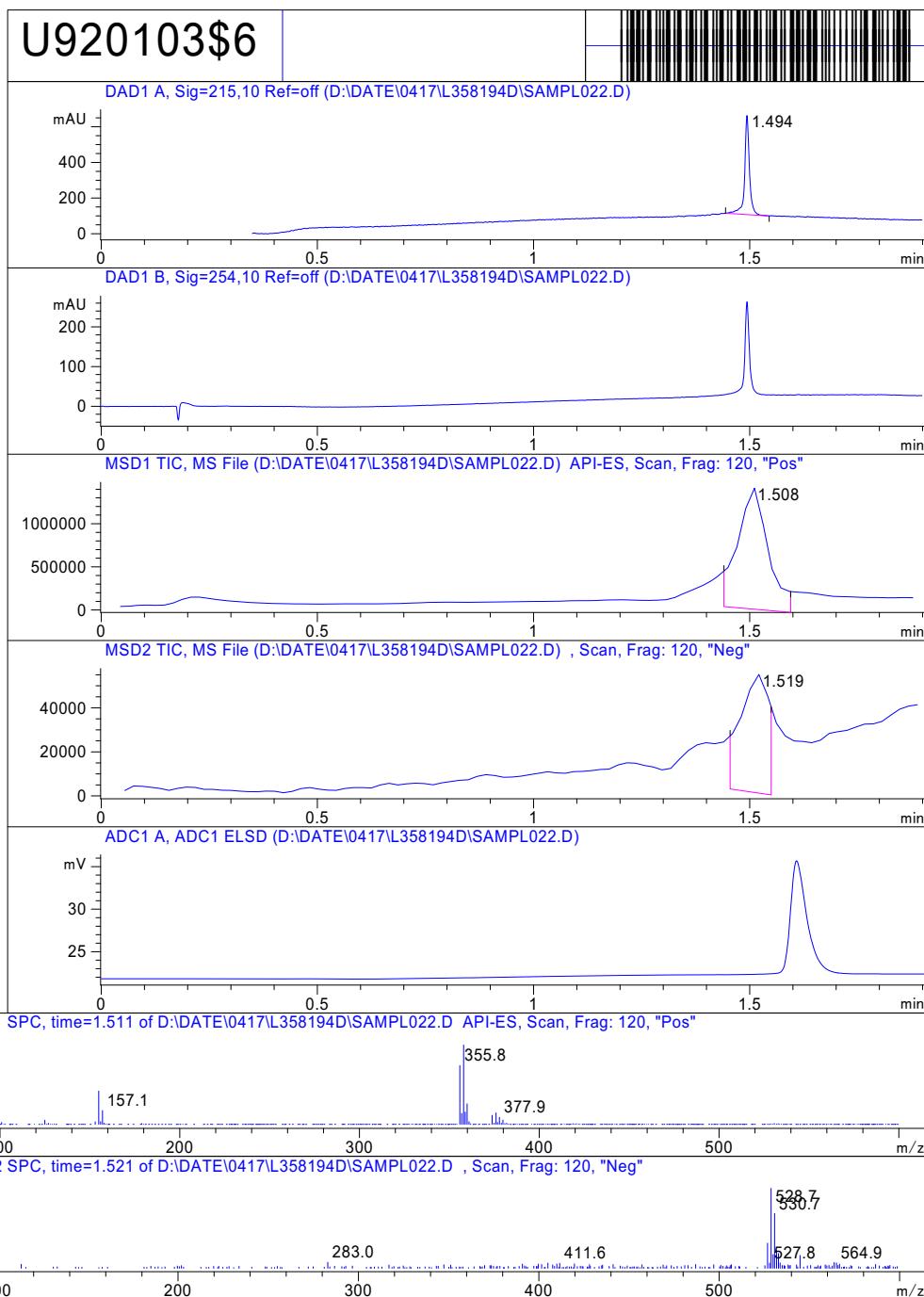
MaxPeak: 100.00%
Ret_Time: 1.494 min



Mol Wt 356.6
Exact Mass 356.97

Time Area%

1 1.494 100.00



Inj.Date 4/17/2021

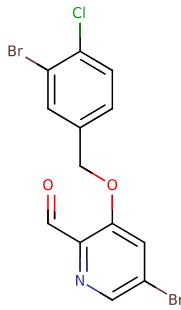
E

-VL-

Acq. Method C:\HPCHEM\-> ->

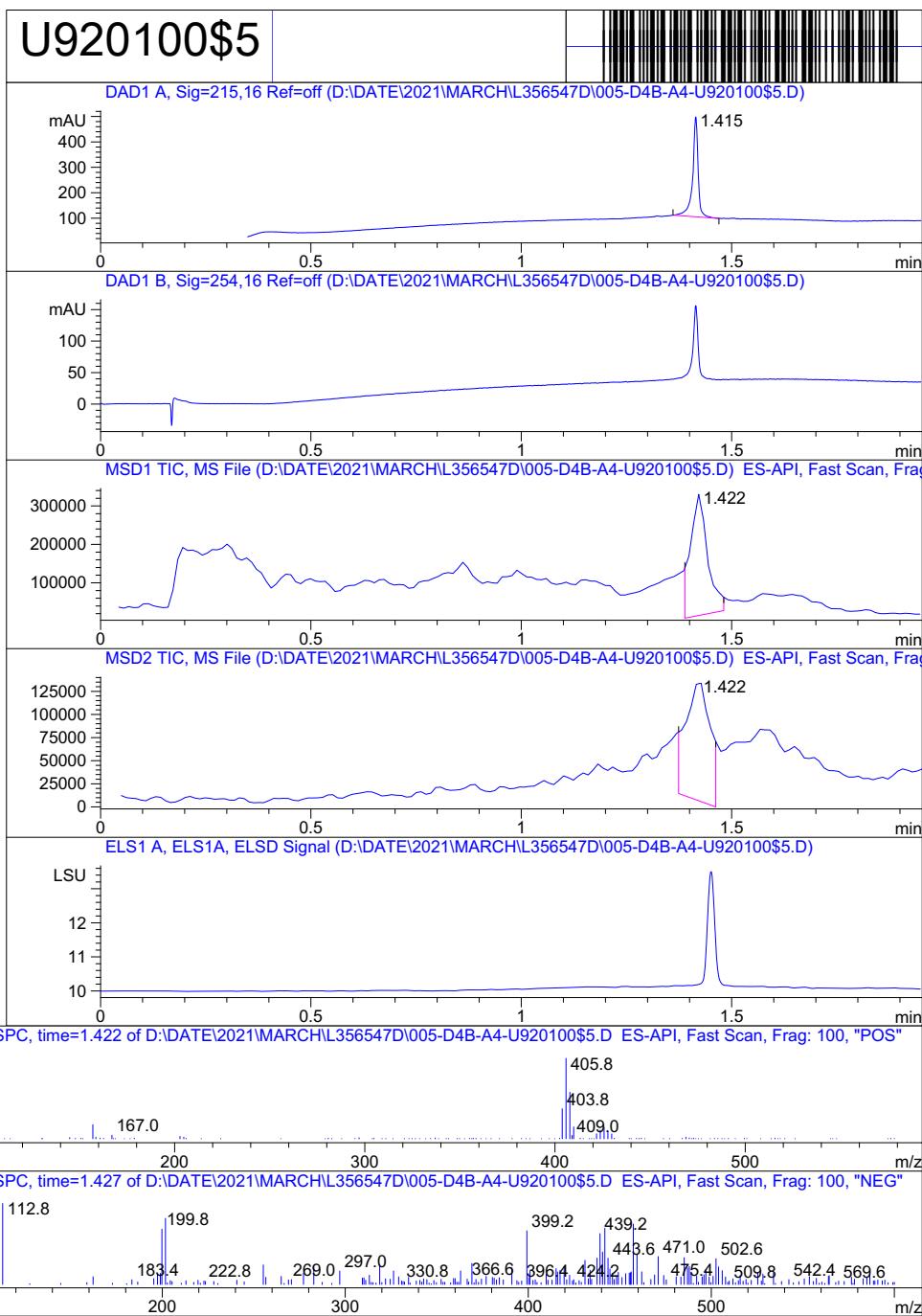
Z4954569127_

MaxPeak: 100.00%
Ret_Time: 1.415 min



Mol Wt 405.47
Exact Mass 404.87
Time Area%

1 1.415 100.00

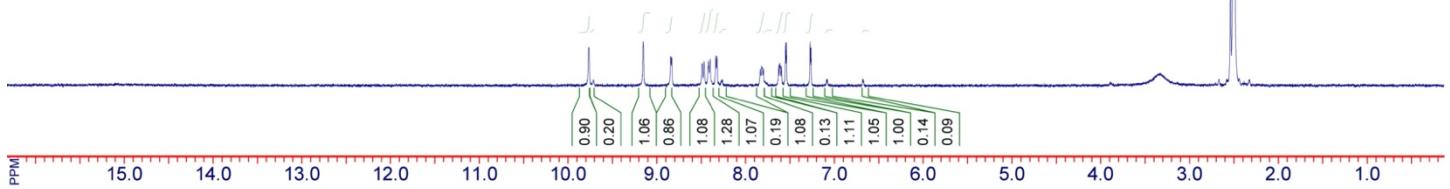
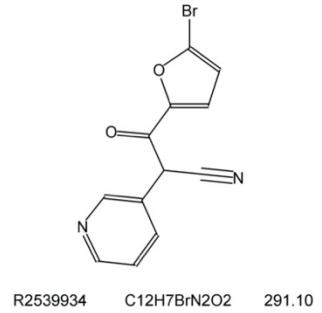
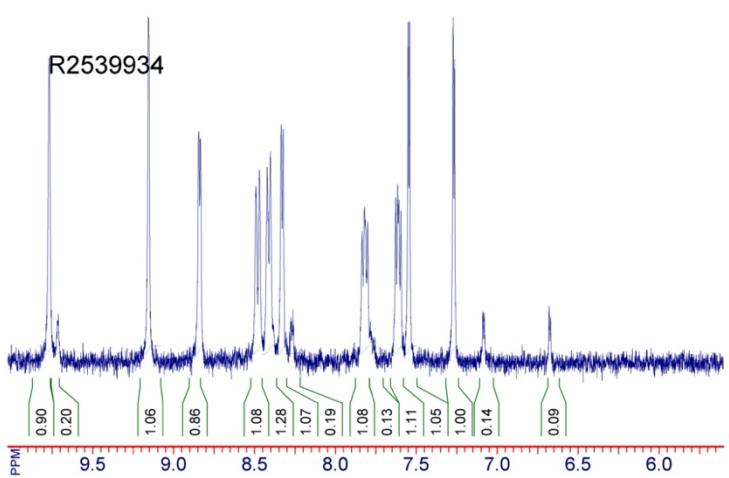


Inj.Date 4/11/2021

T <invalid>

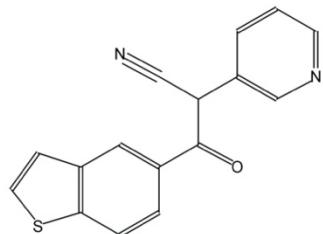
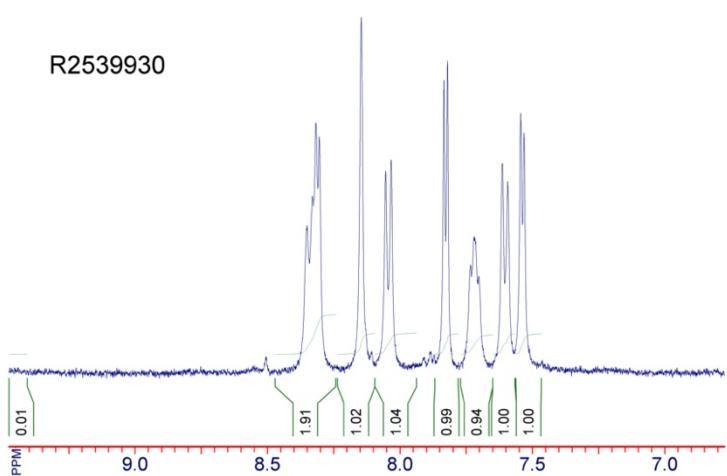
Acq. Method C:\Users\ -> ->

Z4954569121_

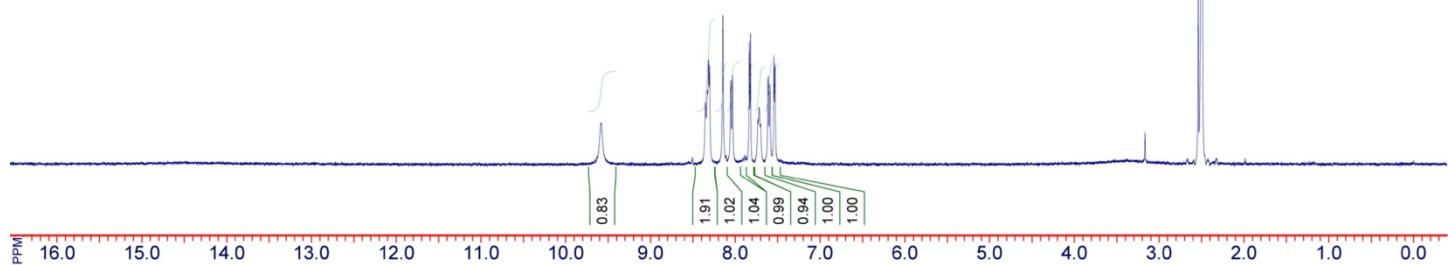


Z1410957817_

R2539930



R2539930 C16H10N2OS 278.33



Z3302062818_