

Name: Imipramine Hydrochloride Impurity B
(3-(5H-dibenzo[b,f]azepin-5-yl)-N,N-dimethylpropan-1-amine hydrochloride)

Lot#: GR-15-045

Test Date: 08/05/2020 (re-test date: 08/05/2025)

CAS No.: 58262-51-4 (303-54-8 free base)

MF: C₁₉H₂₃ClN₂

MW: 314.85

Appearance: Yellow Solid

Purity: 99.6% by HPLC (average of two sample preparations)

¹H-NMR: Conforms

MS-ESI (+) Conforms (shows peak at m/z = 279.18 [M_{free base}+H]⁺)

Storage Store at 0-8°C in a dry place away from direct sunlight

Approved by:

Date: 08/07/2020



Viorica Rusu, QC/QA Manager

GR-15-045
1H of GR-15-045 in DMSO-d6; 1600; 7 Aug. 2020

7.30
7.29
7.28
7.11
7.09
7.02
7.01
6.99
6.76

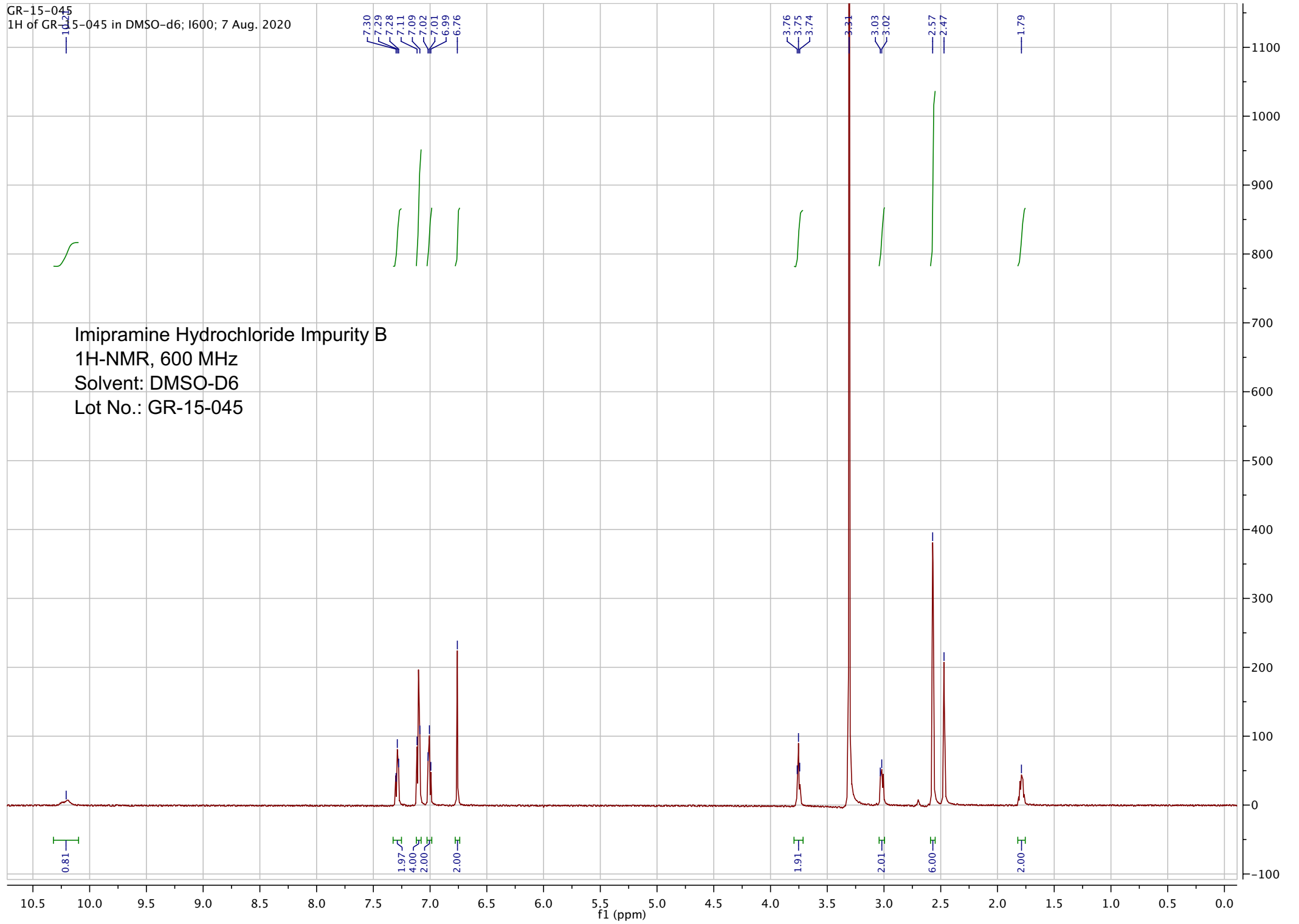
3.76
3.75
3.74

3.31
3.03
3.02

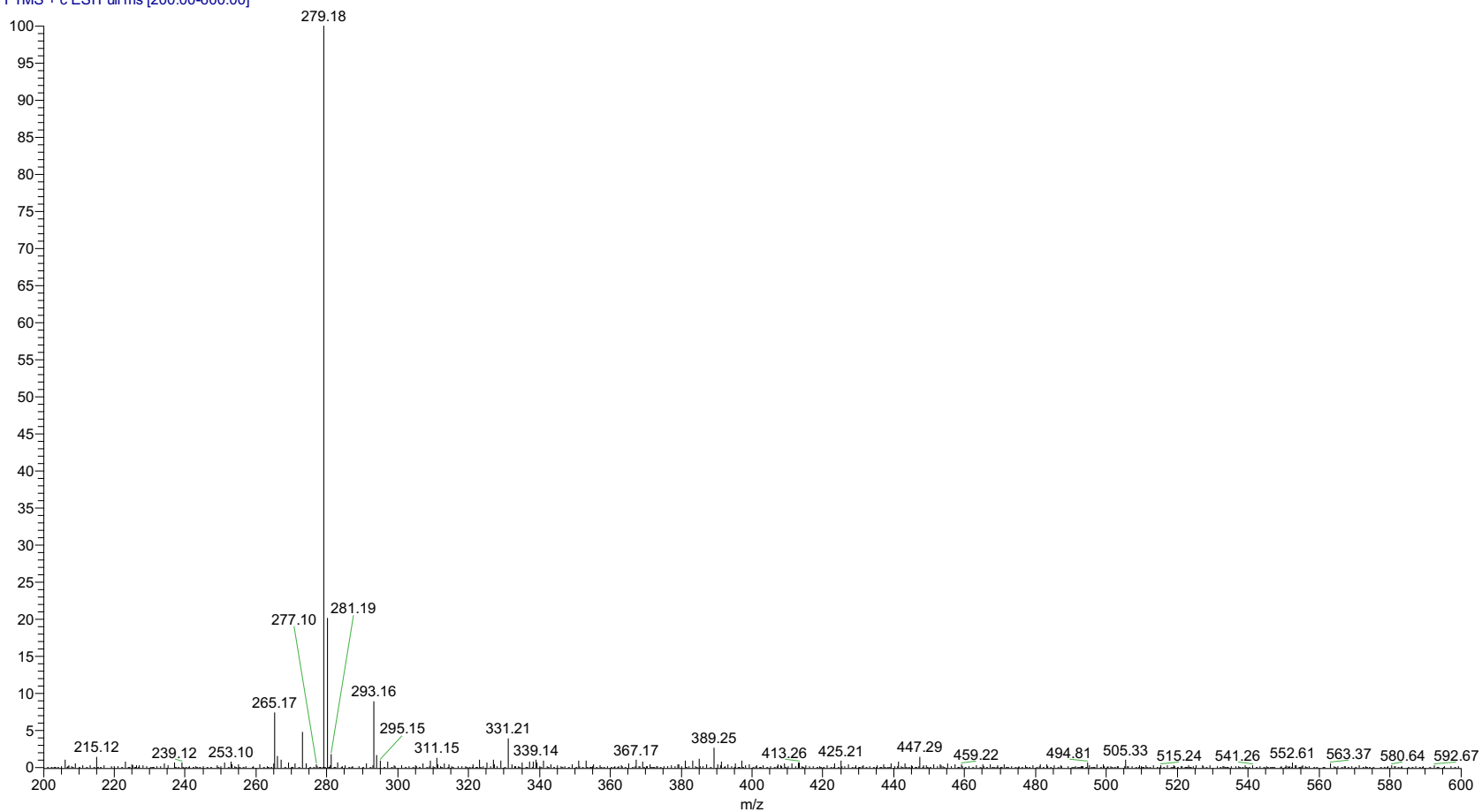
2.57
2.47

1.79

Imipramine Hydrochloride Impurity B
1H-NMR, 600 MHz
Solvent: DMSO-D6
Lot No.: GR-15-045

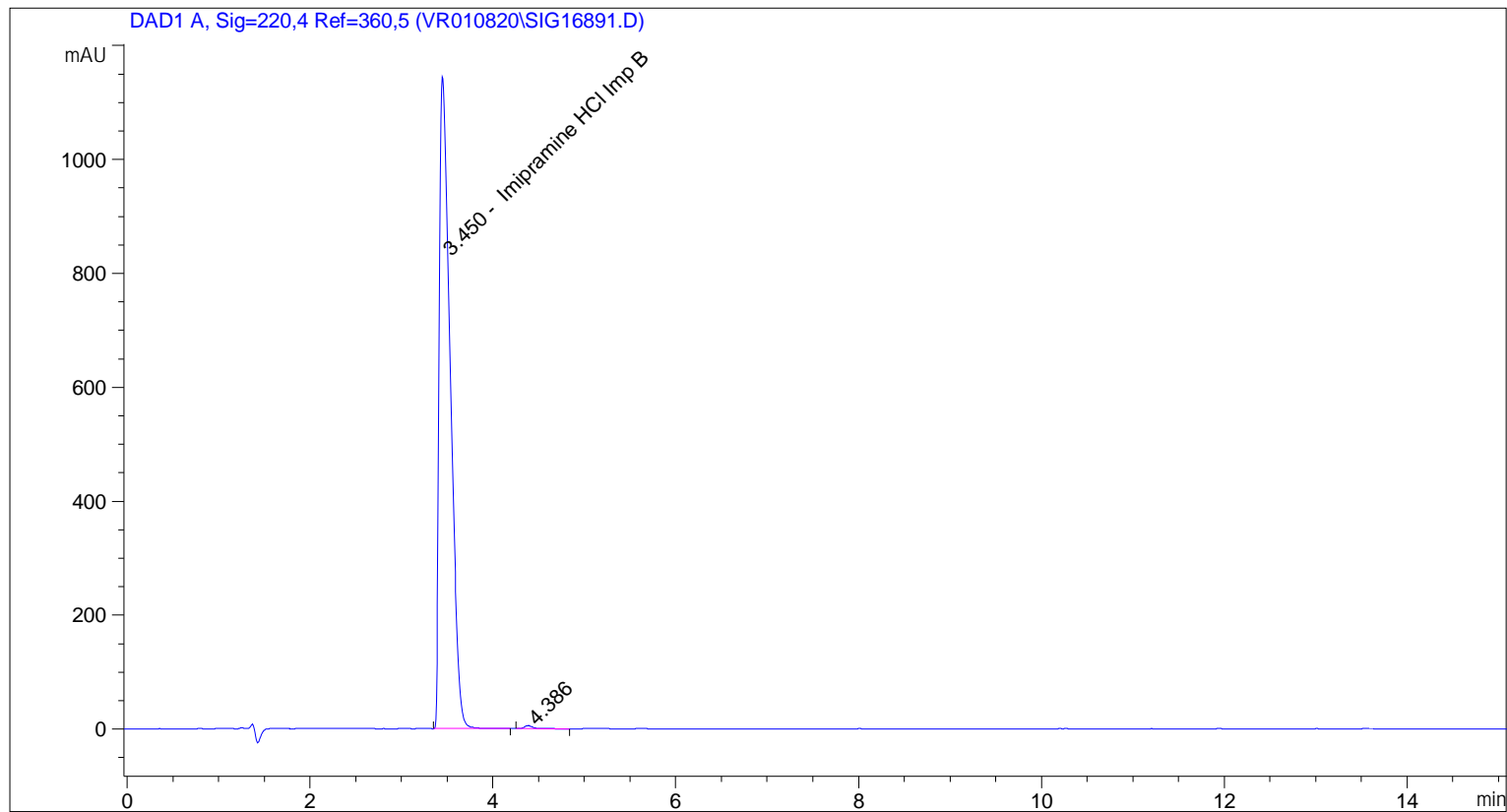


pp_2020_017_GR15045_002 #605 RT: 2.46 AV: 1 NL: 4.11E7
T: FTMS + c ESI Full ms [200.00-600.00]



ESI-MS spectrum for sample GR-15-045. Shows monoisotopic $[M+H]^+$ mass.

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Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 35
Injection Date : 8/5/2020 3:02:19 PM Inj Volume : 5.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR_080520_045.M
Last changed : 8/5/2020 3:01:14 PM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR080520_045PM.M
Last changed : 8/5/2020 3:19:16 PM by vrusu



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Area Percent Report
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Sorted By : Signal
Calib. Data Modified : 8/5/2020 3:19:00 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

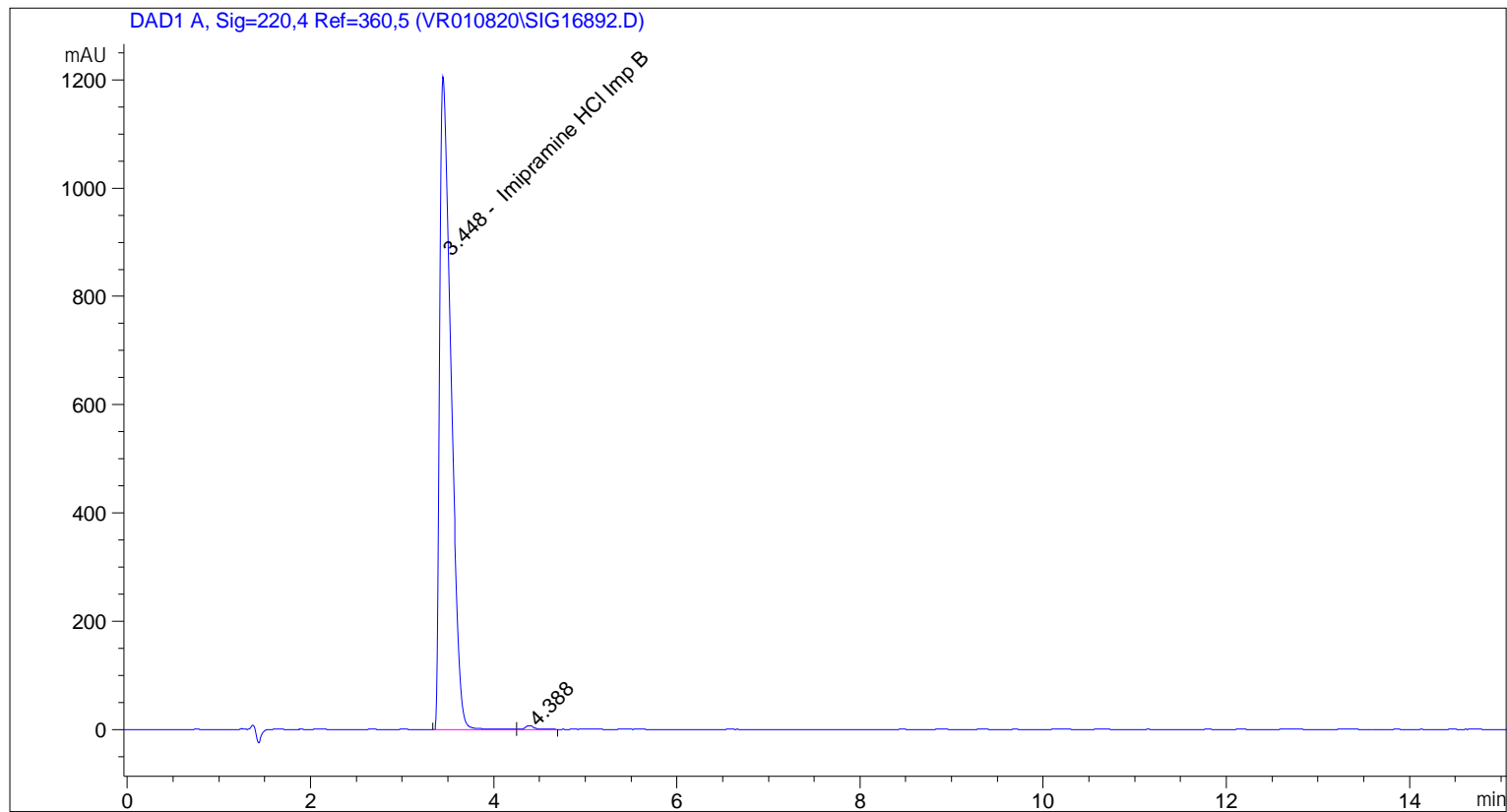
Signal 1: DAD1 A, Sig=220,4 Ref=360,5

| Peak # | RetTime [min] | Type | Width [min] | Area [mAU*s] | Area % | Name |
|--------|---------------|------|-------------|--------------|---------|----------------------|
| 1 | 3.450 | BB | 0.1267 | 9493.61426 | 99.6115 | Imipramine HCl Imp B |
| 2 | 4.386 | BB | 0.1011 | 37.03065 | 0.3885 | ? |

Totals : 9530.64491

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*** End of Report ***

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Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 36
Injection Date : 8/5/2020 3:20:58 PM Inj Volume : 5.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR_080520_045.M
Last changed : 8/5/2020 3:19:55 PM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR080520_045PM.M
Last changed : 8/5/2020 3:19:16 PM by vrusu



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Area Percent Report
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Sorted By : Signal
Calib. Data Modified : 8/5/2020 3:19:00 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=220,4 Ref=360,5

| Peak # | RetTime [min] | Type | Width [min] | Area [mAU*s] | Area % | Name |
|--------|---------------|------|-------------|--------------|---------|----------------------|
| 1 | 3.448 | BV | 0.1286 | 1.01986e4 | 99.5551 | Imipramine HCl Imp B |
| 2 | 4.388 | VB | 0.1003 | 45.57967 | 0.4449 | ? |

Totals : 1.02442e4

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*** End of Report ***