



INDOFINE Chemical Company, Inc.

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Phone: (908) 359-6778 • FAX: (908) 359-1179

website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com

CERTIFICATE OF ANALYSIS

Catalog Number: 06-374

Product Name: **CEPHAELINE**
(Desmethylemetine; Dihydropsychothrine; Alangine B)

CAS Number: [483-17-0]

Lot Number: 1708859

Chemical Formula: $C_{28}H_{38}N_2O_4$

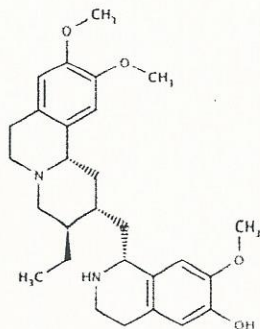
Molecular Weight: 466.61

Appearance: Tan powder

NMR Spectrum: Enclosed (conforms to the structure)

Storage: Store in a cool, dry place

Purity(HPLC): 98%





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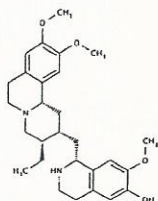
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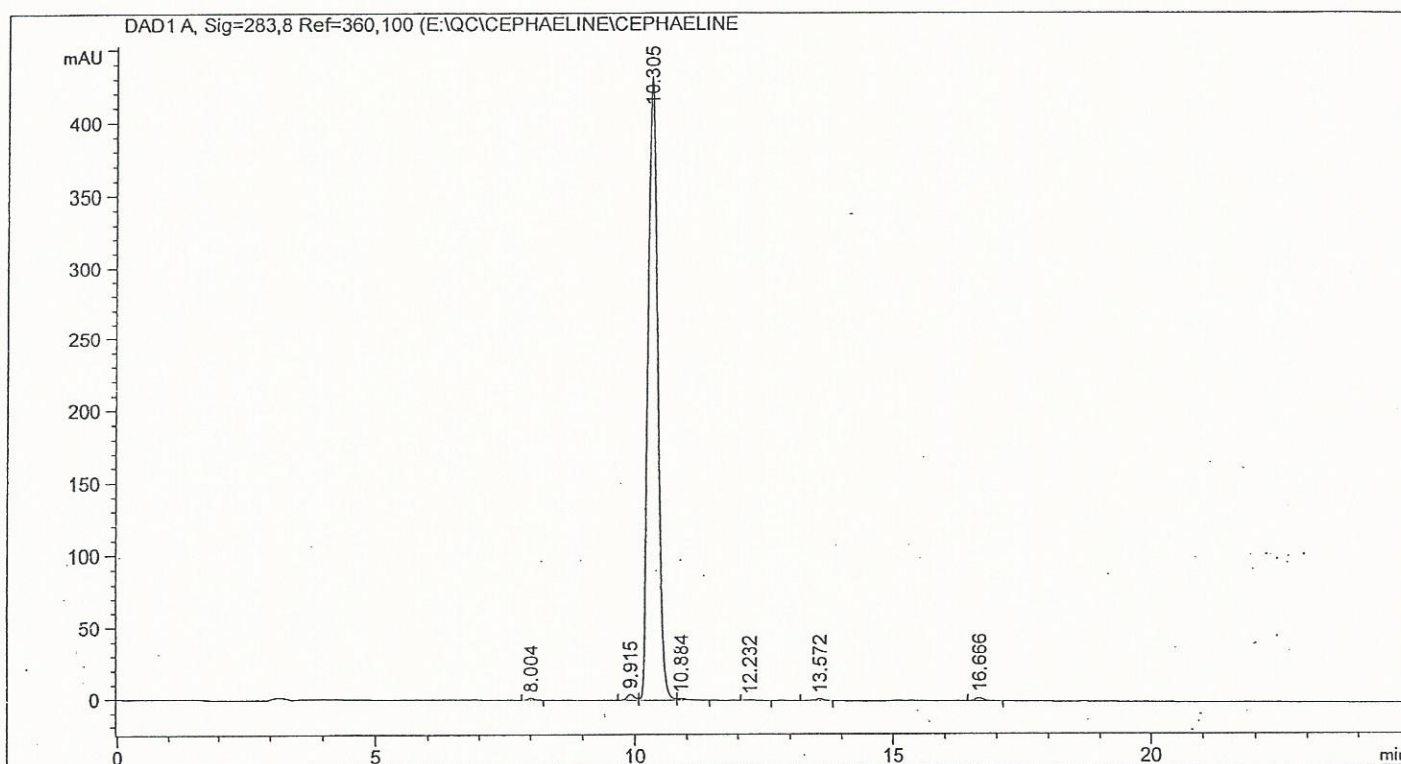
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HPLC ANALYSIS



Catalog No.: 06-374
Product Name: Cephaeline
Lot No.: 1708859



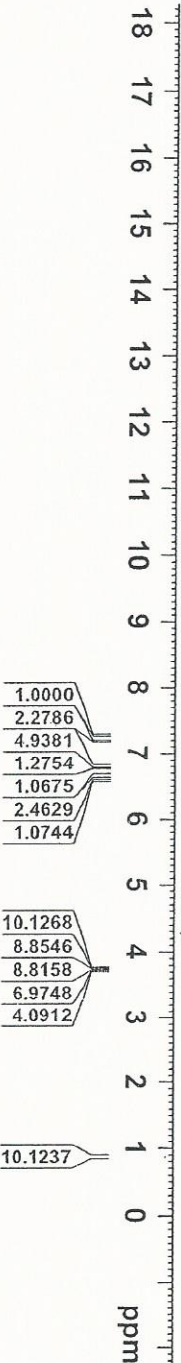
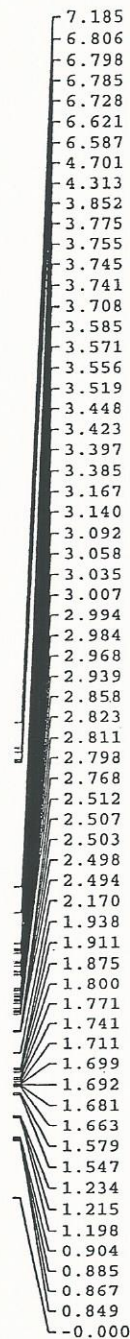
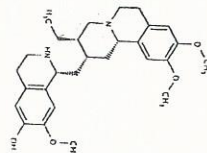
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#	min		min	mAU*s	mAU	%
1	8.004	BBA	0.1319	13.07564	1.49777	0.2282
2	9.915	BV	0.1524	43.23214	4.33135	0.7546
3	10.305	VV	0.2051	5602.21582	432.62714	98.0073
4	10.884	VB	0.2095	19.16978	1.27431	0.3346
5	12.232	BB	0.1681	7.40333	6.53614e-1	0.1292
6	13.572	BBA	0.1797	14.62574	1.22137	0.2553
7	16.666	VBA	0.1892	29.25891	2.35053	0.5107

5728.98135 443.95608



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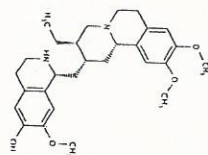


Current Data Parameters
 NAME: CEPHALEXIN
 PROCD: 1
 P2 - Acquisition Parameters
 DATE_: 20170818
 TIME_: 12:28
 INSTRUM: spect
 PROBD: 5 mm PABBI 1H/
 TD: 65536
 SOLVENT: DMSO
 NS: 2
 DS: 4
 FIDRES: 0.121515 Hz
 AQ: 1.3416317 sec
 RG: 327.500
 DW: 60.000 usec
 DE: 8.000 usec
 TE: 300.2 K
 D1: 1.0000000 sec
 D11: 1
 ***** CHANNEL f1 *****
 NU1: 1
 PR1: 7.20 usec
 PUL1: 12.0000000 Mhz
 SFO1: 400.1460012 Mhz
 P1 - Processing parameters
 SI: 32768
 SF: 400.1460012 Mhz
 AS: 32768
 DS: 4
 GB: 0
 PC: 1.00

Catalog No.: 06-374
 Product Name: Cephalexin
 Lot No.: 1708859



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Catalog No.: 06-374
 Product Name: Cephaeline
 Lot No.: 1708859

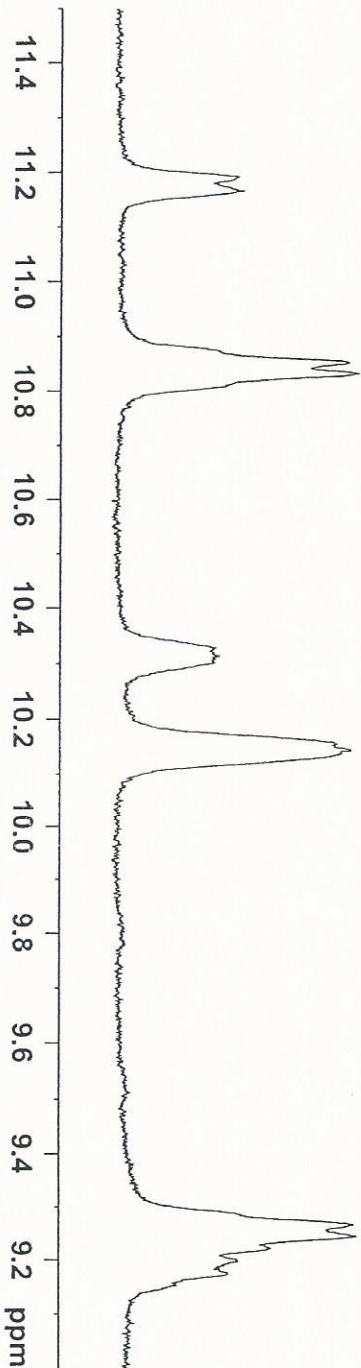
11.191
 11.165

10.851
 10.831

10.326
 10.312

10.140

9.264
 9.243
 9.222
 9.196
 9.174



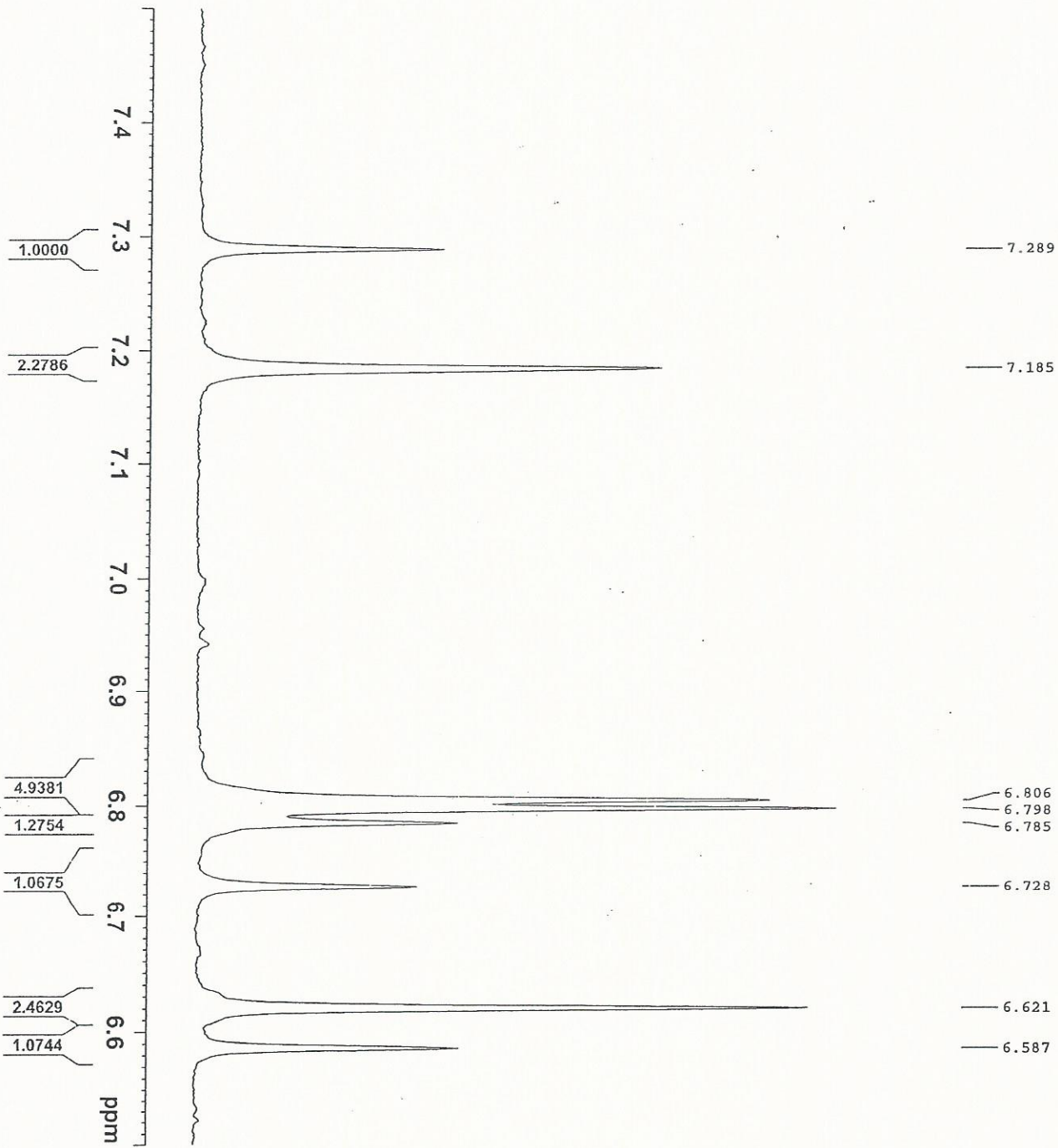
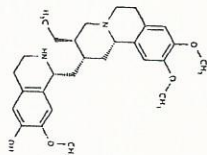
Current Data Parameters
 NAME: CEPHAELINE
 PROCNO: 10
 P1 - Acquisition Parameters
 Date_: 20190328
 Time: 12.25
 INSTRUM: spect
 PROBRD: 5 mm PAB1 HV/
 PULPROG: zgpg30
 TD: 65536
 SFO: 400.1460012 MHz
 SOLVENT: DMF-D
 NS: 2
 DS: 4
 SWH: 8221.485 Hz
 F2 - Processing parameters
 AQ: 3.2845257 sec
 AS: 0.1000000 sec
 DM: 60.000 uS
 DE: 8.00 uS
 TE: 300.2 K
 D1: 1.0000000 sec
 T00: 1

***** CHANNEL f1 *****
 P1: 12.0000000 MHz
 P2: 12.0000000 MHz
 P3: 12.0000000 MHz
 P4: 12.0000000 MHz
 P5: 12.0000000 MHz
 P6: 12.0000000 MHz
 P7: 12.0000000 MHz
 P8: 12.0000000 MHz
 P9: 12.0000000 MHz
 P10: 12.0000000 MHz
 P11: 12.0000000 MHz
 P12: 12.0000000 MHz
 P13: 12.0000000 MHz
 P14: 12.0000000 MHz
 P15: 12.0000000 MHz
 P16: 12.0000000 MHz
 P17: 12.0000000 MHz
 P18: 12.0000000 MHz
 P19: 12.0000000 MHz
 P20: 12.0000000 MHz
 P21: 12.0000000 MHz
 P22: 12.0000000 MHz
 P23: 12.0000000 MHz
 P24: 12.0000000 MHz
 P25: 12.0000000 MHz
 P26: 12.0000000 MHz
 P27: 12.0000000 MHz
 P28: 12.0000000 MHz
 P29: 12.0000000 MHz
 P30: 12.0000000 MHz
 P31: 12.0000000 MHz
 P32: 12.0000000 MHz
 P33: 12.0000000 MHz
 P34: 12.0000000 MHz
 P35: 12.0000000 MHz
 P36: 12.0000000 MHz
 P37: 12.0000000 MHz
 P38: 12.0000000 MHz
 P39: 12.0000000 MHz
 P40: 12.0000000 MHz
 P41: 12.0000000 MHz
 P42: 12.0000000 MHz
 P43: 12.0000000 MHz
 P44: 12.0000000 MHz
 P45: 12.0000000 MHz
 P46: 12.0000000 MHz
 P47: 12.0000000 MHz
 P48: 12.0000000 MHz
 P49: 12.0000000 MHz
 P50: 12.0000000 MHz
 P51: 12.0000000 MHz
 P52: 12.0000000 MHz
 P53: 12.0000000 MHz
 P54: 12.0000000 MHz
 P55: 12.0000000 MHz
 P56: 12.0000000 MHz
 P57: 12.0000000 MHz
 P58: 12.0000000 MHz
 P59: 12.0000000 MHz
 P60: 12.0000000 MHz
 P61: 12.0000000 MHz
 P62: 12.0000000 MHz
 P63: 12.0000000 MHz
 P64: 12.0000000 MHz
 P65: 12.0000000 MHz
 P66: 12.0000000 MHz
 P67: 12.0000000 MHz
 P68: 12.0000000 MHz
 P69: 12.0000000 MHz
 P70: 12.0000000 MHz
 P71: 12.0000000 MHz
 P72: 12.0000000 MHz
 P73: 12.0000000 MHz
 P74: 12.0000000 MHz
 P75: 12.0000000 MHz
 P76: 12.0000000 MHz
 P77: 12.0000000 MHz
 P78: 12.0000000 MHz
 P79: 12.0000000 MHz
 P80: 12.0000000 MHz
 P81: 12.0000000 MHz
 P82: 12.0000000 MHz
 P83: 12.0000000 MHz
 P84: 12.0000000 MHz
 P85: 12.0000000 MHz
 P86: 12.0000000 MHz
 P87: 12.0000000 MHz
 P88: 12.0000000 MHz
 P89: 12.0000000 MHz
 P90: 12.0000000 MHz
 P91: 12.0000000 MHz
 P92: 12.0000000 MHz
 P93: 12.0000000 MHz
 P94: 12.0000000 MHz
 P95: 12.0000000 MHz
 P96: 12.0000000 MHz
 P97: 12.0000000 MHz
 P98: 12.0000000 MHz
 P99: 12.0000000 MHz
 P100: 12.0000000 MHz





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- 7.289
- 7.185
- 6.806
- 6.798
- 6.785
- 6.728
- 6.621
- 6.587



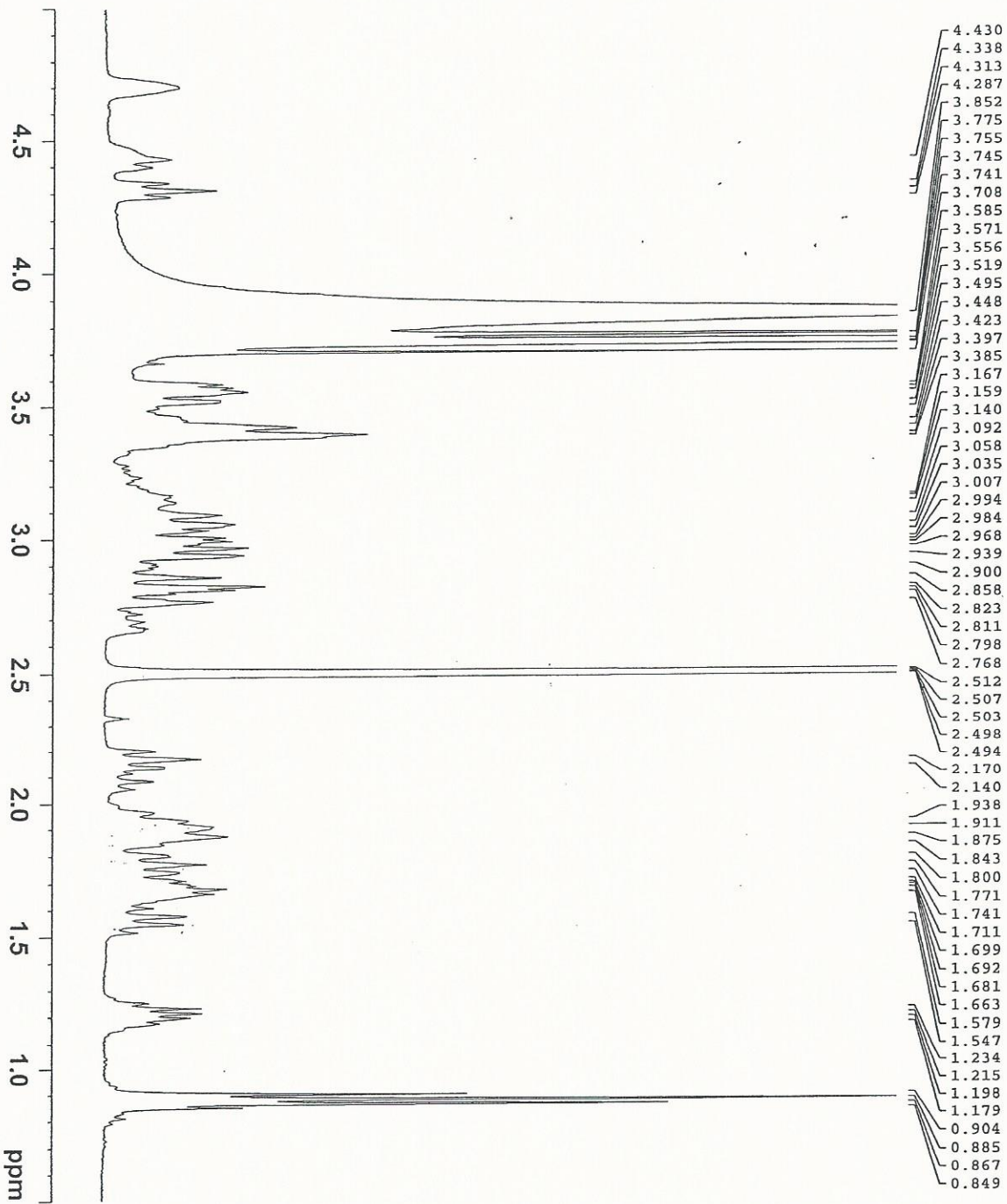
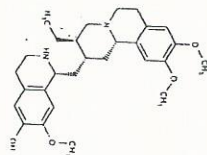
Catalog No.: 06-374
 Product Name: Cephaeline
 Lot No.: 1708859

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***** CHANNEL f1 *****
NAME:          CEPAELINE
EXPNO:         10
PROCNO:        1
PROCNAME:      1
DATE_ACQ:     12.13
TIME:          12.13
INSTRUM:       spect
PROBHD:        5 mm PASSEL 1H/
PULPROG:       zgpg30
AQUATION:      48240
SOLVENT:       DMSO
DS:            16
SI:            1
SMILES:        Cc1ccc2c(c1)c3c(c2)oc4c3c5c(c4)OC(=O)C5
AQ:            8221.685 Hz
RG:            327.819
DE:            129.489 uSAC
TE:            300.2 K
NUC1:          13C
NUC2:          13C
P1:            12.00 uSAC
D1:            1.0000000 sec
TD:            1
SFO:           101.625 MHz
FIDRES:        0.00170000 Hz
AQRES:         0.00000000 Hz
SFO1:          400.1460013 MHz
P11:           12.00 uSAC
D11:           1.00000000 sec
PC:            0
PC1:           1.00
  
```



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10.1268
 8.8546
 8.8158
 6.9748
 4.0912

10.1237

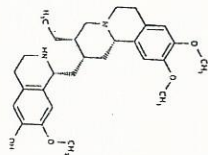


Current Data Parameters
 EXPNO 1
 PROCNO 1
 F2 - Acquisition Parameters
 Date_ 12-23
 Time 12:33
 INSTRUM spect
 PROCNM 5 ca PASEP
 PULPROG zgpg30
 FWHM 4.930
 SFO 400.1460000
 SOLVENT DMSO
 NS 16
 DS 4
 SWH 8231.661 Hz
 AQ 0.121491 Hz
 RG 312.849 Hz
 HQ 1317.882 Hz
 DE 1.000000
 TE 320.2 K
 TD 1.000000
 TSD 1 sec
 ***** CHANNEL f1 *****
 NUC1 13C
 P1 1.0000000 sec
 PL1 0.0010000 MHz
 SFO1 400.1460000 MHz
 F2 - Processing parameters
 SI 32768
 SF 400.1460000 MHz
 EQ 1.0000000
 LA 0
 GB 0
 PC 1.00

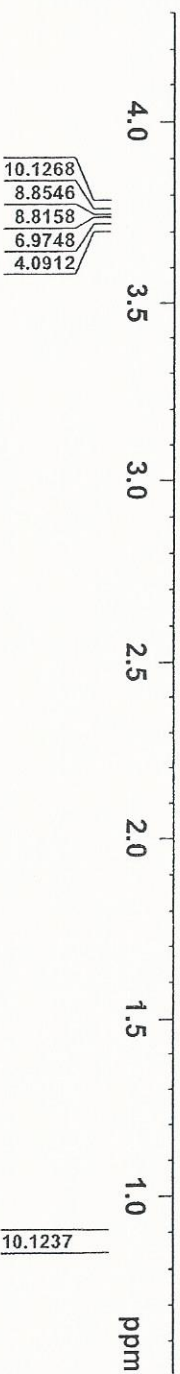
Catalog No.: 06-374
 Product Name: Cephaeline
 Lot No.: 1708859



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- 3.852
- 3.775
- 3.755
- 3.745
- 3.741
- 3.708
- 3.585
- 3.571
- 3.556
- 3.519
- 3.495
- 3.448
- 3.423
- 3.397
- 3.385
- 3.167
- 3.159
- 3.140
- 3.092
- 3.058
- 3.035
- 3.007
- 2.994
- 2.984
- 2.968
- 2.939
- 2.909
- 2.900
- 2.858
- 2.823
- 2.811
- 2.798
- 2.768
- 2.512
- 2.507
- 2.503
- 2.498
- 2.494
- 2.201
- 2.170
- 2.140
- 1.968
- 1.938
- 1.911
- 1.875
- 1.843
- 1.800
- 1.771
- 1.741
- 1.711
- 1.699
- 1.692
- 1.681
- 1.663
- 1.608
- 1.579
- 1.547
- 1.234
- 1.215
- 1.198
- 1.179
- 0.904
- 0.885
- 0.867
- 0.849



Current Data Parameters
 NAME: CEPHAELENE
 PROCNO: 1
 F2 - Acquisition Parameters
 Date_: 20170318
 TIME: 11:00:00
 INSTRUM: spect
 PROBO: 5 mm PABCI 1H/
 TD: 65536
 TO: 07:00
 SOLVENT: DMSO
 DS: 4
 AS: 4
 AQ: 2
 FIDRES: 0.211683 Hz
 NO: 1.944937 sec
 DW: 60.000 usec
 DE: 1.900 usec
 TE: 300.2 K
 D1: 1.00000000 sec
 D11: 1
 ***** CHANNEL f1 *****
 NU1: 133.000 MHz
 P1: 1.75 usec
 PL1: 0.00 dB
 SFO1: 400.1418013 MHz
 F2 - Processing parameters
 SI: 32768
 SF: 400.1418012 MHz
 HSB: 0
 SSB: 0
 GB: 0
 PC: 1.00



Catalog No.: 06-374
 Product Name: Cephalexin
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