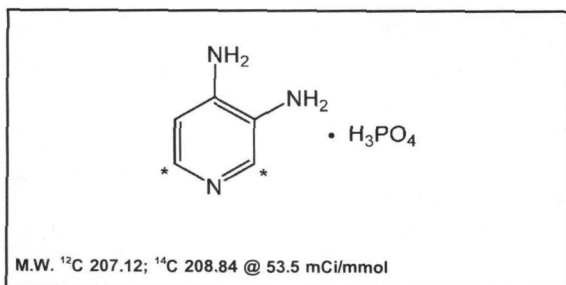




Product Data Sheet

MC-2325

3,4-Diaminopyridine phosphate, [2,6-¹⁴C]-



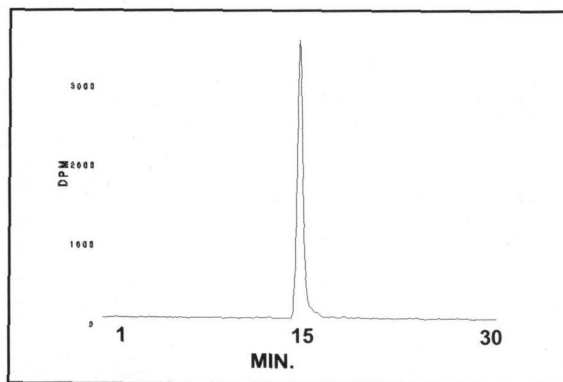
Lot #: R12-189-0535-A-20090914-JH

Specific Activity: 53.5 mCi/mmol

Packaged as: Solid

Date of Analysis: September 17, 2009

Radiochemical Purity: 99.5%



HPLC ANALYSIS LOT R12-189-0535-A-20090914-JH
File Name: int61116 Date and Time: 9/17/2009 11:53:37 A
Unit 6 Radio

| Peak # | Area % | Time | Area |
|--------|--------|----------|-------------|
| 1 | 99.59 | 15.01670 | 11159.96575 |
| 2 | 0.15 | 15.91000 | 16.71255 |
| 3 | 0.26 | 16.39000 | 28.79697 |
| Totals | 100.00 | | 11205.47527 |

Storage Recommendation: Store at -20°C.

Product Warranty: Stated on the reverse side of this Product Data Sheet.

Caution: Not For Use In Humans Or Clinical Diagnosis. This product is intended for investigational or manufacturing use only. It is pharmaceutically unrefined and is not intended for use in humans. Responsibility for its use in humans, as a diagnostic reagent, and compliance with federal laws rests solely with the purchaser.

MC-2325

3,4-Diaminopyridine phosphate, [2,6-¹⁴C]-

Lot R12-189-0535-A-20090914-JH

A) All chromatograms were run using the HPLC method described on the Product Data Sheet.

Concentrations and volumes:

Standard solution concentration was 1.0 mg/mL.

3,4-Diaminopyridine phosphate, [2,6-¹⁴C]- concentration was 72.0 µCi/mL.

Volume of standard alone injection was 5.0 µL.

Volume of **3,4-Diaminopyridine phosphate, [2,6-¹⁴C]-** alone injection was 1.0 µL.

Co-injection solution consisted of 1.0 µL **3,4-Diaminopyridine phosphate, [2,6-¹⁴C]-** + 5.0 µL standard.

Volume of co-injection was 6.0 µL.

Volume of blank injection was 1.0 µL.

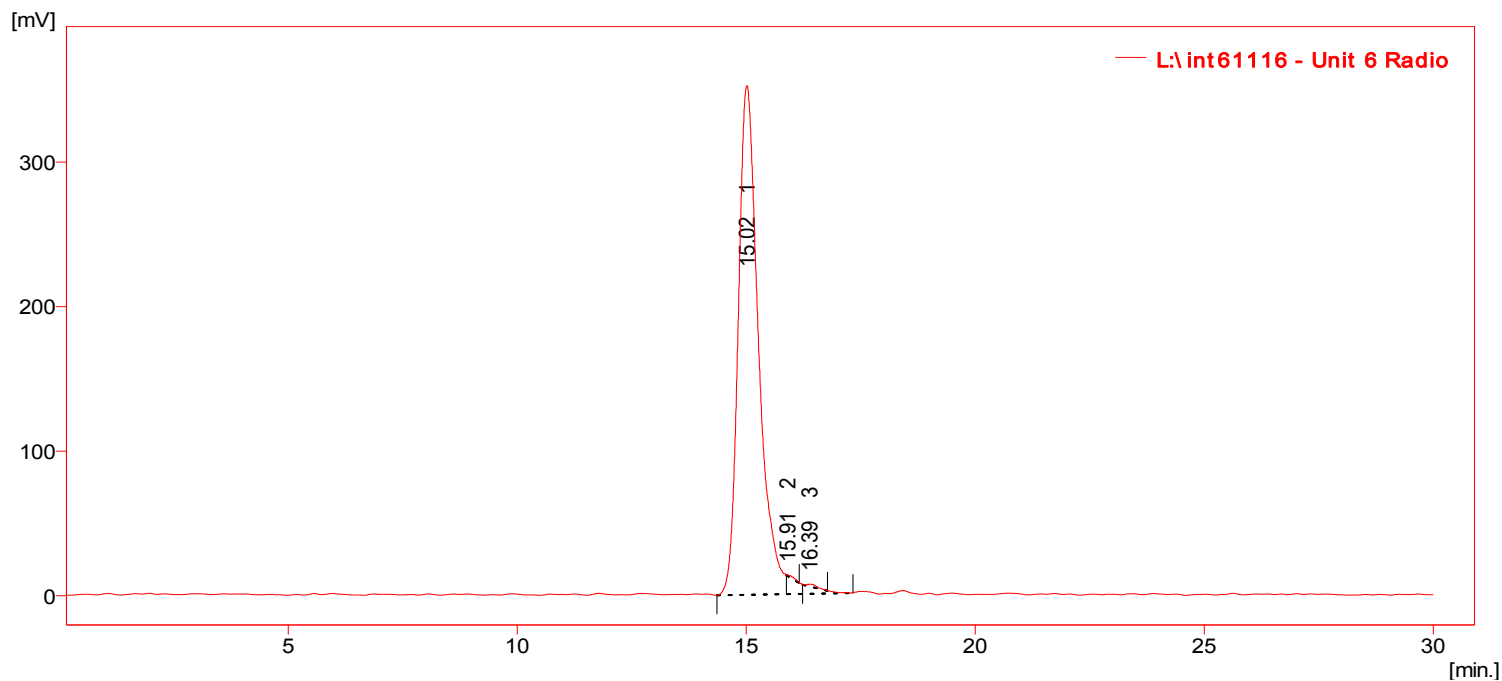
B) Mass spectrometry - Positive mode

C) NMR

MC-2325
3,4-Diaminopyridine phosphate, [2,6-14C]-
Lot R12-189-0535-A-20090914-JH

Chromatogram Info:

| | | | |
|--------------|---|---------------|-------------------------|
| File Name | : L:\int61116 | File Created | : 5/2/2014 2:11:06 PM |
| Origin | : Acquired, Acquisition started 9/17/2009 11:23:38 AM | Acquired Date | : 9/17/2009 11:53:37 AM |
| Project | : Work1 | By | : Administrator |
| Method | : Unit6-40minrun | By | : Administrator |
| Description | : Radiochemical trace of 14C material alone | | |
| Created | : 7/14/2007 11:10 AM | Modified | : 5/2/2014 2:23 PM |
| Column | : | Detection | : Radiochemical |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



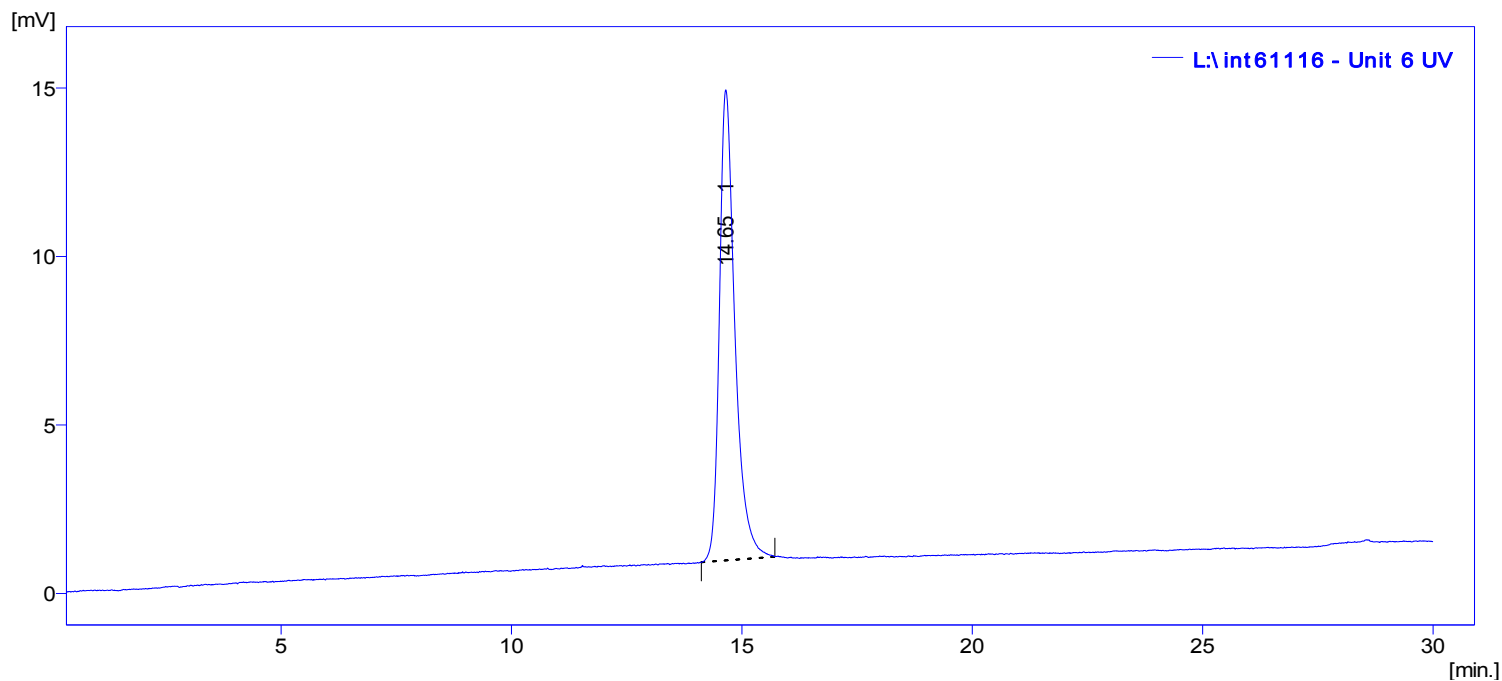
Result Table (Uncal - L:\int61116 - Unit 6 Radio)

| Compound Name | Reten. Time [min] | Area [mV.s] | Height [mV] | Area [%] | Height [%] | W05 [min] | Efficiency [th.pl] | Eff/I [t.p./m] | Resolution [-] | Symmetry/Tailing [-] | Response Factor |
|---------------|-------------------|-------------|-------------|----------|------------|-----------|--------------------|----------------|----------------|----------------------|-----------------|
| 1 | 15.02 | 11159.966 | 352.13 | 99.59 | 99.2 | 0.45 | 6079 | 121577 | | 2.21 | |
| 2 | 15.91 | 16.713 | 1.02 | 0.15 | 0.3 | 0.06 | 436712 | 8734233 | 2.07 | 4.20 | |
| 3 | 16.39 | 28.797 | 1.73 | 0.26 | 0.5 | 0.27 | 20415 | 408291 | 1.73 | 1.77 | |
| Total | | 11205.475 | 354.88 | 100.00 | 100.0 | | | | | | |

MC-2325
3,4-Diaminopyridine phosphate, [2,6-14C]-
Lot R12-189-0535-A-20090914-JH

Chromatogram Info:

| | | | |
|--------------|---|---------------|-------------------------|
| File Name | : L:\int61116 | File Created | : 5/2/2014 2:11:06 PM |
| Origin | : Acquired, Acquisition started 9/17/2009 11:23:38 AM | Acquired Date | : 9/17/2009 11:53:37 AM |
| Project | : Work1 | By | : Administrator |
| Method | : Unit6-40minrun | By | : Administrator |
| Description | : UV trace of 14C material alone | Modified | : 5/2/2014 2:24 PM |
| Created | : 7/14/2007 11:10 AM | | |
| Column | : | Detection | : UV 304nm |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



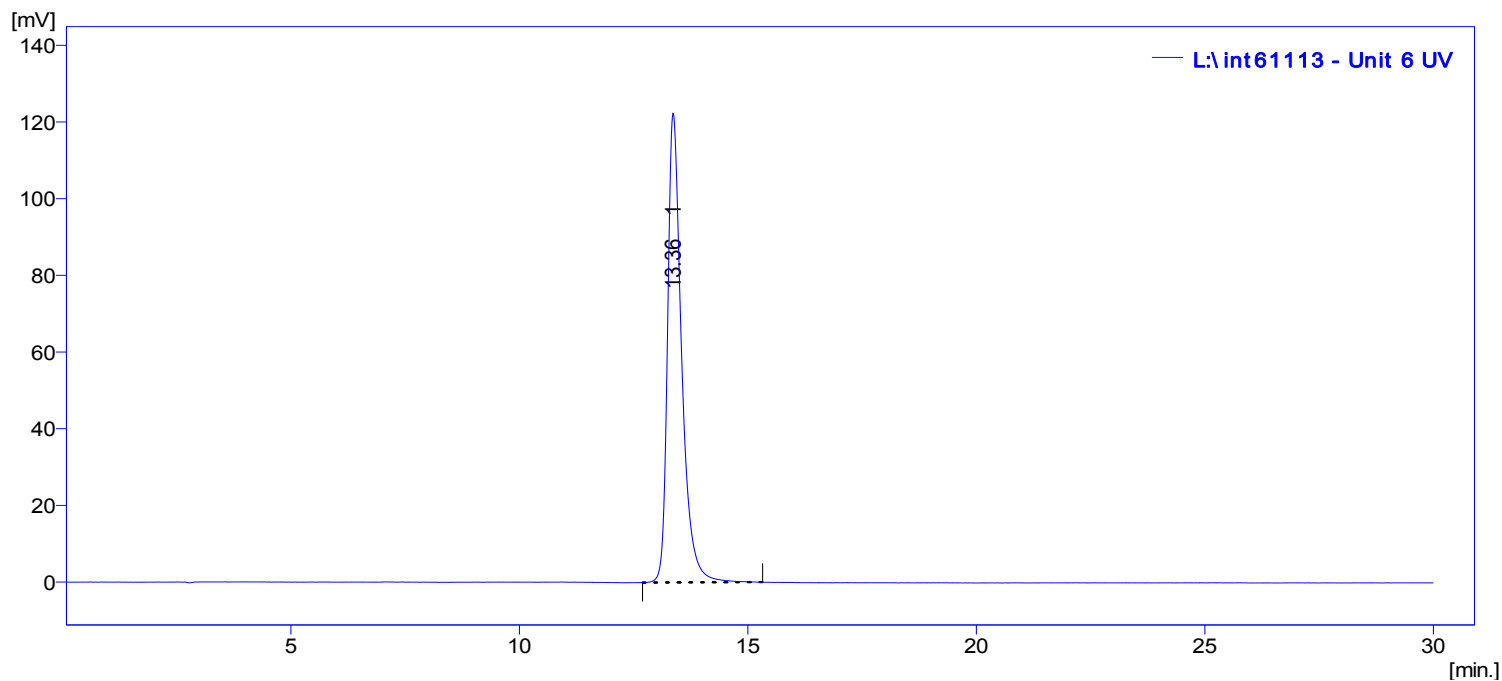
Result Table (Uncal - L:\int61116 - Unit 6 UV)

| Compound Name | Reten. Time [min] | Area [mV.s] | Height [mV] | Area [%] | Height [%] | W05 [min] | Efficiency [th.pl] | Eff/I [t.p./m] | Resolution [-] | Symmetry/Tailing [-] | Response Factor |
|---------------|-------------------|-------------|-------------|----------|------------|-----------|--------------------|----------------|----------------|----------------------|-----------------|
| 1 | 14.65 | 327.133 | 13.97 | 100.00 | 100.0 | 0.34 | 10087 | 201736 | | 1.42 | |
| Total | | 327.133 | 13.97 | 100.00 | 100.0 | | | | | | |

MC-2325
3,4-Diaminopyridine phosphate, [2,6-14C]-
Lot R12-189-0535-A-20090914-JH

Chromatogram Info:

| | | | |
|--------------|--|---------------|------------------------|
| File Name | : L:\int61113 | File Created | : 5/2/2014 2:11:06 PM |
| Origin | : Acquired, Acquisition started 9/16/2009 2:06:31 PM | Acquired Date | : 9/16/2009 2:36:30 PM |
| Project | : Work1 | By | : Administrator |
| Method | : Unit6-40minrun | By | : Administrator |
| Description | : UV trace of standard alone | Modified | : 5/2/2014 2:20 PM |
| Created | : 7/14/2007 11:10 AM | | |
| Column | : | Detection | : UV 304nm |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



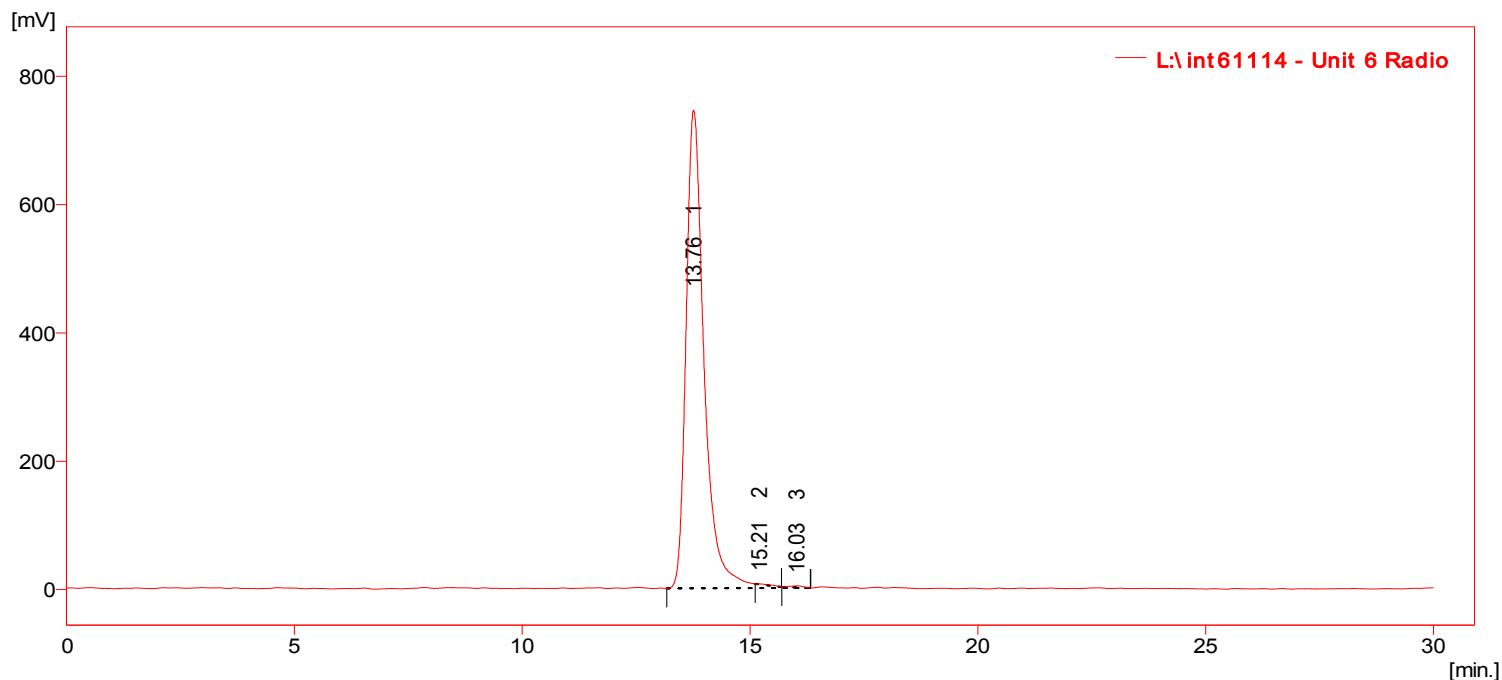
Result Table (Uncal - L:\int61113 - Unit 6 UV)

| Compound Name | Reten. Time [min] | Area [mV.s] | Height [mV] | Area [%] | Height [%] | W05 [min] | Efficiency [th.pl] | Eff/I [t.p./m] | Resolution [-] | Symmetry/Tailing [-] | Response Factor |
|---------------|-------------------|-------------|-------------|----------|------------|-----------|--------------------|----------------|----------------|----------------------|-----------------|
| 1 | 13.36 | 2623.399 | 122.45 | 100.00 | 100.0 | 0.31 | 10077 | 201538 | | 1.48 | |
| Total | | 2623.399 | 122.45 | 100.00 | 100.0 | | | | | | |

MC-2325
3,4-Diaminopyridine phosphate, [2,6-14C]-
Lot R12-189-0535-A-20090914-JH

Chromatogram Info:

| | | | |
|--------------|---|---------------|------------------------|
| File Name | : L:\int61114 | File Created | : 5/2/2014 2:11:06 PM |
| Origin | : Acquired, Acquisition started 9/16/2009 2:59:54 PM | Acquired Date | : 9/16/2009 3:29:54 PM |
| Project | : Work1 | By | : Administrator |
| Method | : Unit6-40minrun | By | : Administrator |
| Description | : Radiochemical trace of 14C material co-injected with standard | | |
| Created | : 7/14/2007 11:10 AM | Modified | : 5/2/2014 2:29 PM |
| Column | : | Detection | : Radiochemical |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



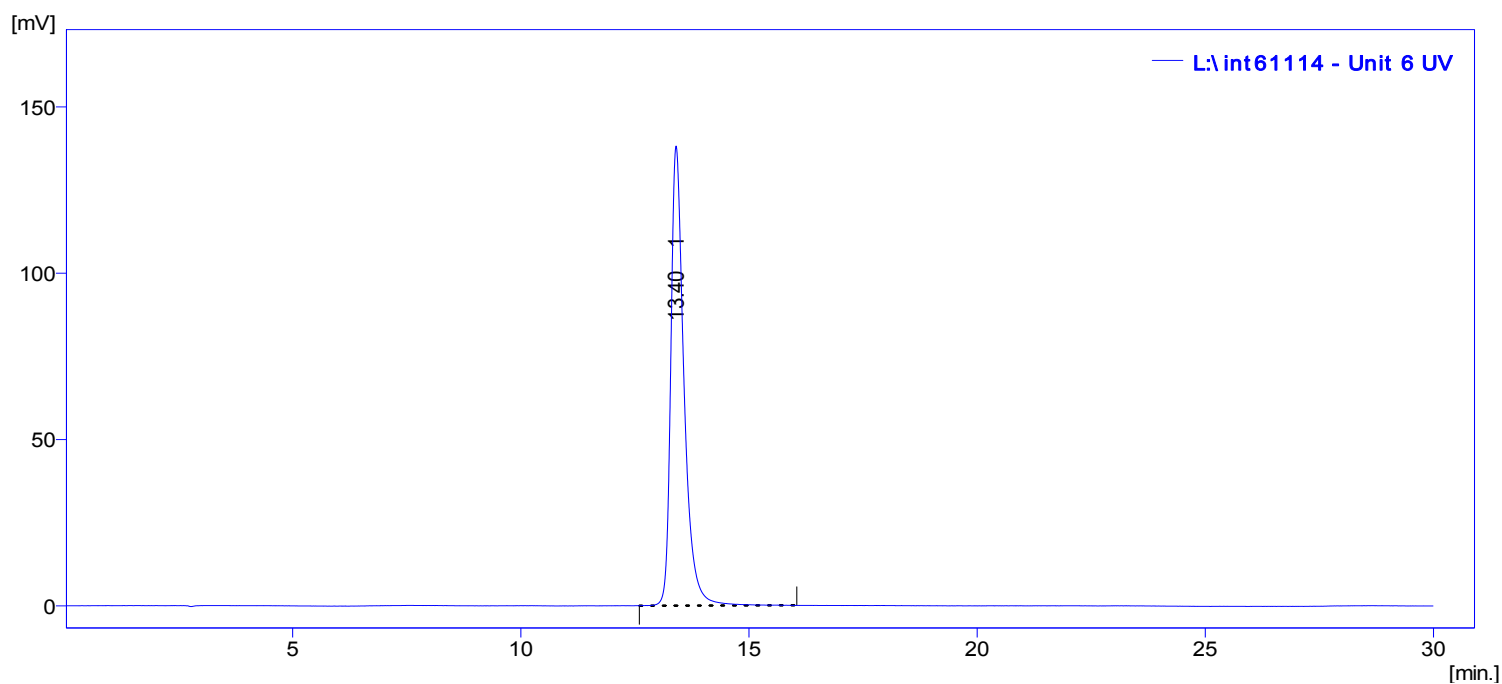
Result Table (Uncal - L:\int61114 - Unit 6 Radio)

| Compound Name | Reten. Time [min] | Area [mV.s] | Height [mV] | Area [%] | Height [%] | W05 [min] | Efficiency [th.pl] | Eff/I [t.p./m] | Resolution [-] | Symmetry/Tailing [-] | Response Factor |
|---------------|-------------------|-------------|-------------|----------|------------|-----------|--------------------|----------------|----------------|----------------------|-----------------|
| 1 | 13.76 | 20575.264 | 745.08 | 99.59 | 99.5 | 0.40 | 6559 | 131180 | | 2.83 | |
| 2 | 15.21 | 29.060 | 1.00 | 0.14 | 0.1 | 0.18 | 38132 | 762633 | 2.93 | 3.27 | |
| 3 | 16.03 | 54.810 | 2.78 | 0.27 | 0.4 | 0.37 | 10214 | 204274 | 1.74 | 0.90 | |
| Total | | 20659.134 | 748.86 | 100.00 | 100.0 | | | | | | |

MC-2325
3,4-Diaminopyridine phosphate, [2,6-14C]-
Lot R12-189-0535-A-20090914-JH

Chromatogram Info:

| | | | |
|--------------|--|---------------|------------------------|
| File Name | : L:\int61114 | File Created | : 5/2/2014 2:11:06 PM |
| Origin | : Acquired, Acquisition started 9/16/2009 2:59:54 PM | Acquired Date | : 9/16/2009 3:29:54 PM |
| Project | : Work1 | By | : Administrator |
| Method | : Unit6-40minrun | By | : Administrator |
| Description | : UV trace of 14C material co-injected with standard | Modified | : 5/2/2014 2:27 PM |
| Created | : 7/14/2007 11:10 AM | | |
| Column | : | Detection | : UV 304nm |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



Result Table (Uncal - L:\int61114 - Unit 6 UV)

| Compound Name | Reten. Time [min] | Area [mV.s] | Height [mV] | Area [%] | Height [%] | W05 [min] | Efficiency [th.pl] | Eff/I [t.p./m] | Resolution [-] | Symmetry/Tailing [-] | Response Factor |
|---------------|-------------------|-------------|-------------|----------|------------|-----------|--------------------|----------------|----------------|----------------------|-----------------|
| 1 | 13.40 | 2790.001 | 138.16 | 100.00 | 100.0 | 0.29 | 11567 | 231336 | | 1.45 | |
| Total | | 2790.001 | 138.16 | 100.00 | 100.0 | | | | | | |

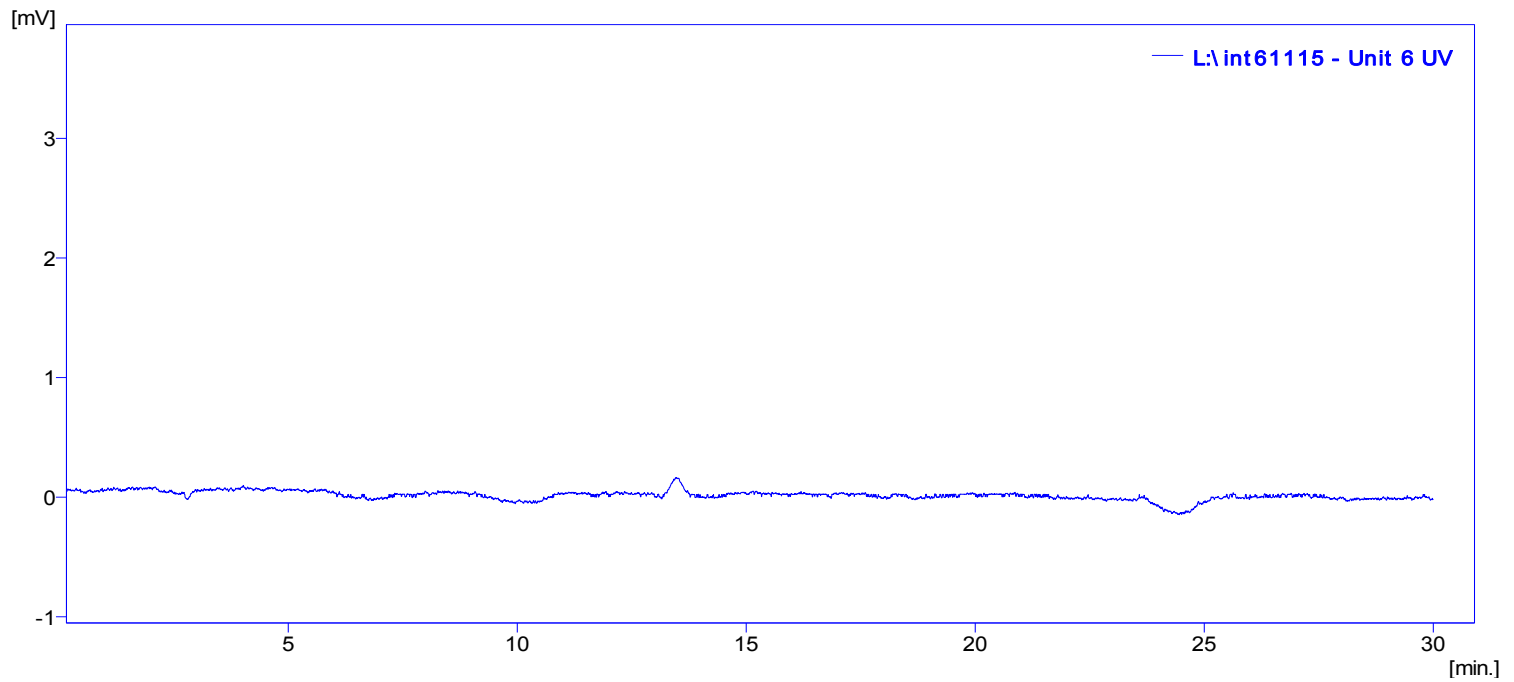
MC-2325
3,4-Diaminopyridine phosphate, [2,6-14C]-
Lot R12-189-0535-A-20090914-JH

Chromatogram Info:

File Name : L:\int61115 File Created : 5/2/2014 2:11:06 PM
Origin : Acquired, Acquisition started 9/16/2009 3:39:14 PM Acquired Date : 9/16/2009 4:09:14 PM
Project : Work1 By : Administrator

Method : Unit6-40minrun By : Administrator
Description : UV trace of blank injection
Created : 7/14/2007 11:10 AM Modified : 5/2/2014 2:19 PM

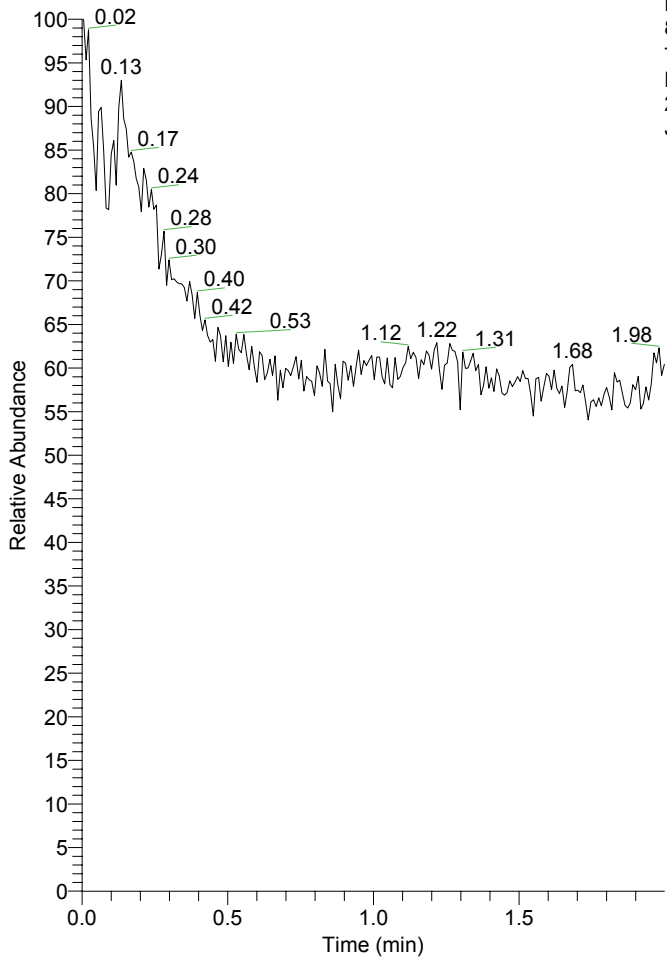
Column : Detection : UV 304nm
Mobile Phase : Temperature :
Flow Rate : Pressure :
Note :



Result Table (Uncal - L:\int61115 - Unit 6 UV)

| Compound Name | Reten. Time [min] | Area [mV.s] | Height [mV] | Area [%] | Height [%] | W05 [min] | Efficiency [th.pl] | Eff/l [t.p./m] | Resolution [-] | Symmetry/Tailing [-] | Response Factor |
|-------------------|-------------------|-------------|-------------|----------|------------|-----------|--------------------|----------------|----------------|----------------------|-----------------|
| No peak to report | | | | | | | | | | | |

RT: 0.00 - 2.00



NL:
8.79E7
TIC MS
MC2325
20090914-
JH-MS

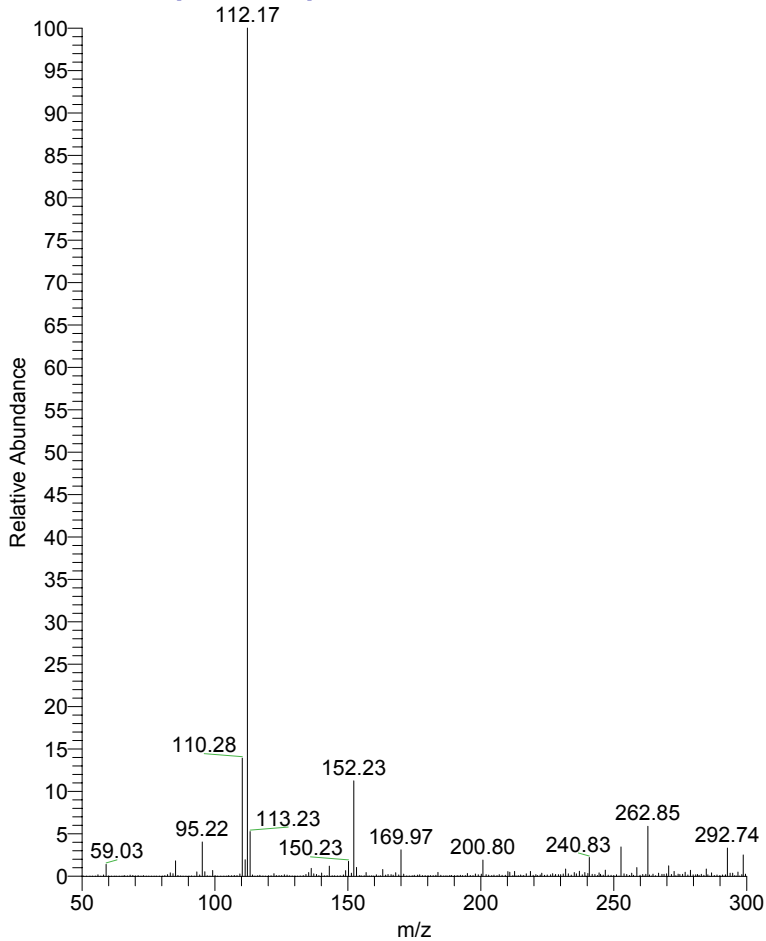
MC2325-20090914-JH-MS#1-225 RT:

T: + c NSI Full ms [50.00-300.00]

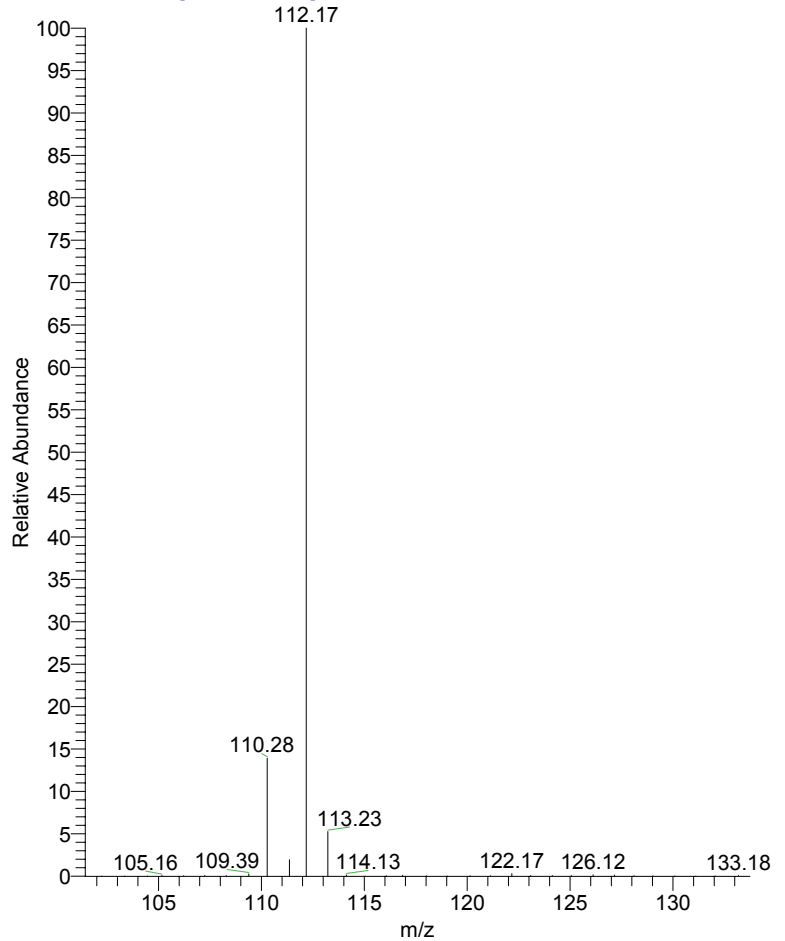
m/z = 107.85-119.21

| m/z | Intensity | Relative |
|--------|------------|----------|
| 108.29 | 15757.6 | 0.06 |
| 109.39 | 66834.8 | 0.25 |
| 110.28 | 3766208.3 | 13.92 |
| 111.36 | 523594.4 | 1.94 |
| 112.17 | 27056269.6 | 100.00 |
| 113.23 | 1419828.3 | 5.25 |
| 114.13 | 37129.5 | 0.14 |
| 115.03 | 2321.1 | 0.01 |
| 116.07 | 13938.2 | 0.05 |
| 116.87 | 29297.8 | 0.11 |
| 118.01 | 6183.6 | 0.02 |
| 119.02 | 3912.4 | 0.01 |

MC2325-20090914-JH-MS #1-225 RT: 0.01-2.00 AV: 225 NL: 2.71E7
T: + c NSI Full ms [50.00-300.00]



MC2325-20090914-JH-MS #1-225 RT: 0.01-2.00 AV: 225 NL: 2.71E7
T: + c NSI Full ms [50.00-300.00]



MC2325 1H NMR in DMSO
Batch 20090914-JH



6.566
6.555

7.588
7.577
7.561

NAME MC2325
EXPNO 1
PROCNO 1
Date_ 20090917
Time 11.31
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 512
DS 0
SWH 8278.146 Hz
FIDRES 0.126314 Hz
AQ 3.9584243 sec
RG 362
DW 60.400 usec
DE 6.50 usec
TE 294.5 K
D1 2.00000000 sec
TD0 1

==== CHANNEL f1 =====
NUC1 1H
P1 14.50 usec
PL1 -0.70 dB
PL1W 10.03411102 W
SF01 400.1324710 MHz
SI 32768
SF 400.1300058 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

