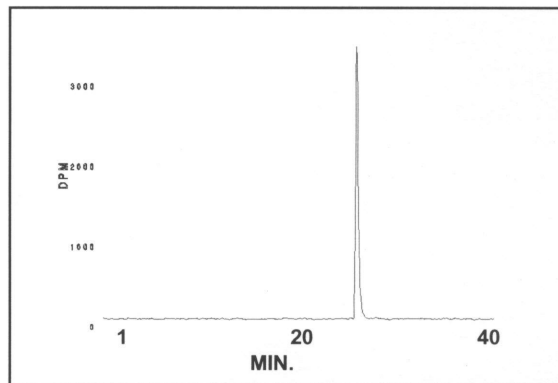
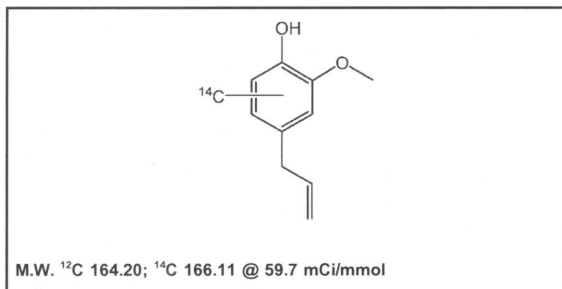




Product Data Sheet

MC-2244

Eugenol, [ring-¹⁴C(U)]-



HPLC ANALYSIS LOT 265-157-0597-A-20140325-NTO
File Name: intZ1352 Date and Time: 3/25/2014 12:09:25 P
Unit Z Radio

Peak #	Area %	Time	Area
1	100.00	26.05600	6564.74836
Totals	100.00		6564.74836

Lot #: 265-157-0597-A-20140325-NTO

Specific Activity: 59.7 mCi/mmol

Concentration: 0.1 mCi/ml; 278.25 μ g/ml

Packaged in: Ethanol solution

Date of Analysis: March 25, 2014

Radiochemical Purity: 99.9%

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-2244

Eugenol, [ring-¹⁴C(U)]-

Lot 265-157-0597-A-20140325-NTO

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.

Eugenol, [ring-¹⁴C(U)]- concentration was 0.1 mCi/ml.

Volume of standard alone injection was 1.0 µl.

Volume of **Eugenol, [ring-¹⁴C(U)]-** alone injection was 1.0 µl.

Co-injection solution consisted of 1.0 µl **Eugenol, [ring-¹⁴C(U)]-** + 1.0 µl standard.

Volume of co-injection was 2.0 µl.

Volume of blank injection was 1.0 µl.

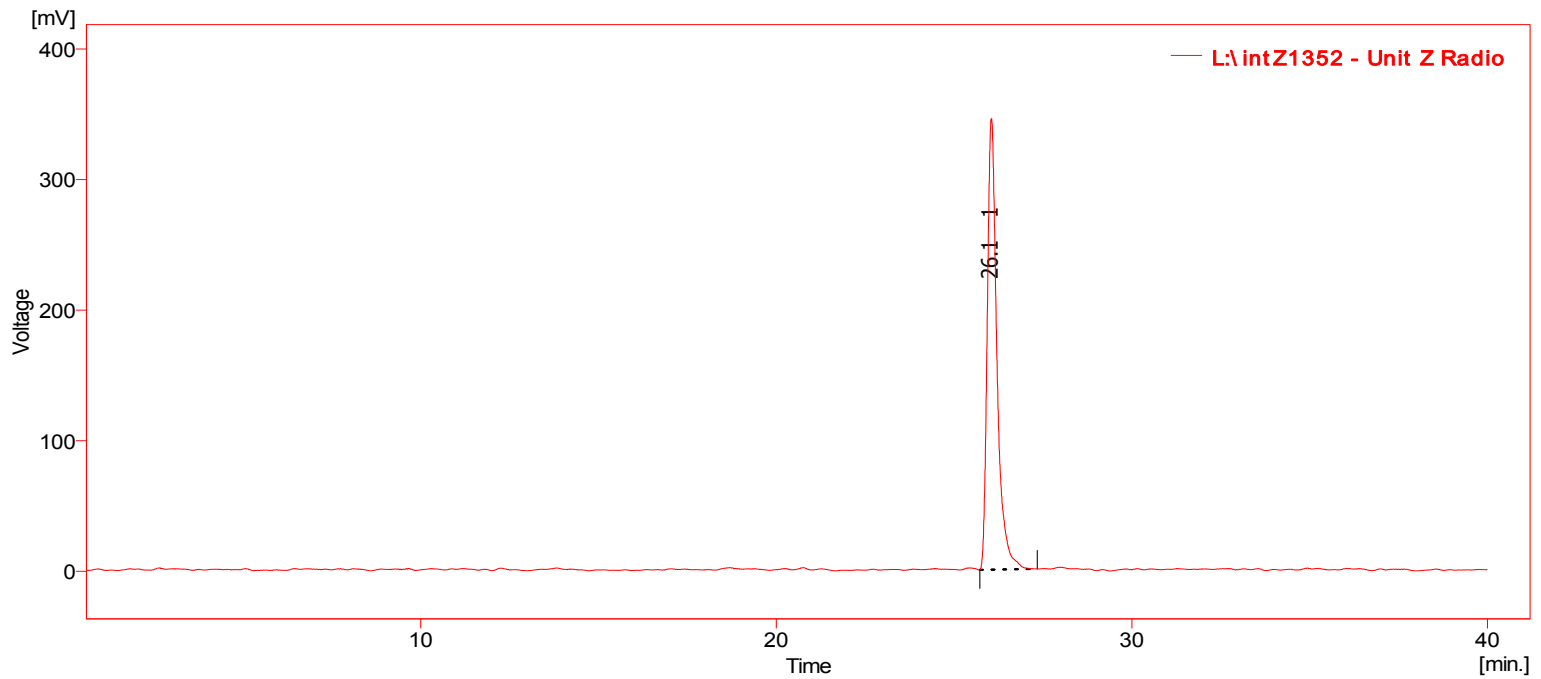
B) GC/MS

C) NMR

MC-2244
Eugenol, [ring-14C(U)]-
Lot 265-157-0597-A-20140325-NT0

Chromatogram Info:

File Name	: L:\intZ1352	File Created	: 3/25/2014 12:09:46 PM
Origin	: Acquired, Acquisition started 3/25/2014 11:29:25 AM	Acquired Date	: 3/25/2014 12:09:25 PM
Project	: Work1	By	: Administrator
Method	: Unit_Z_40min_run	By	: Administrator
Description	: Radiochemical trace of 14C material alone	Modified	: 5/30/2014 2:15 PM
Created	: 8/10/2012 6:18 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



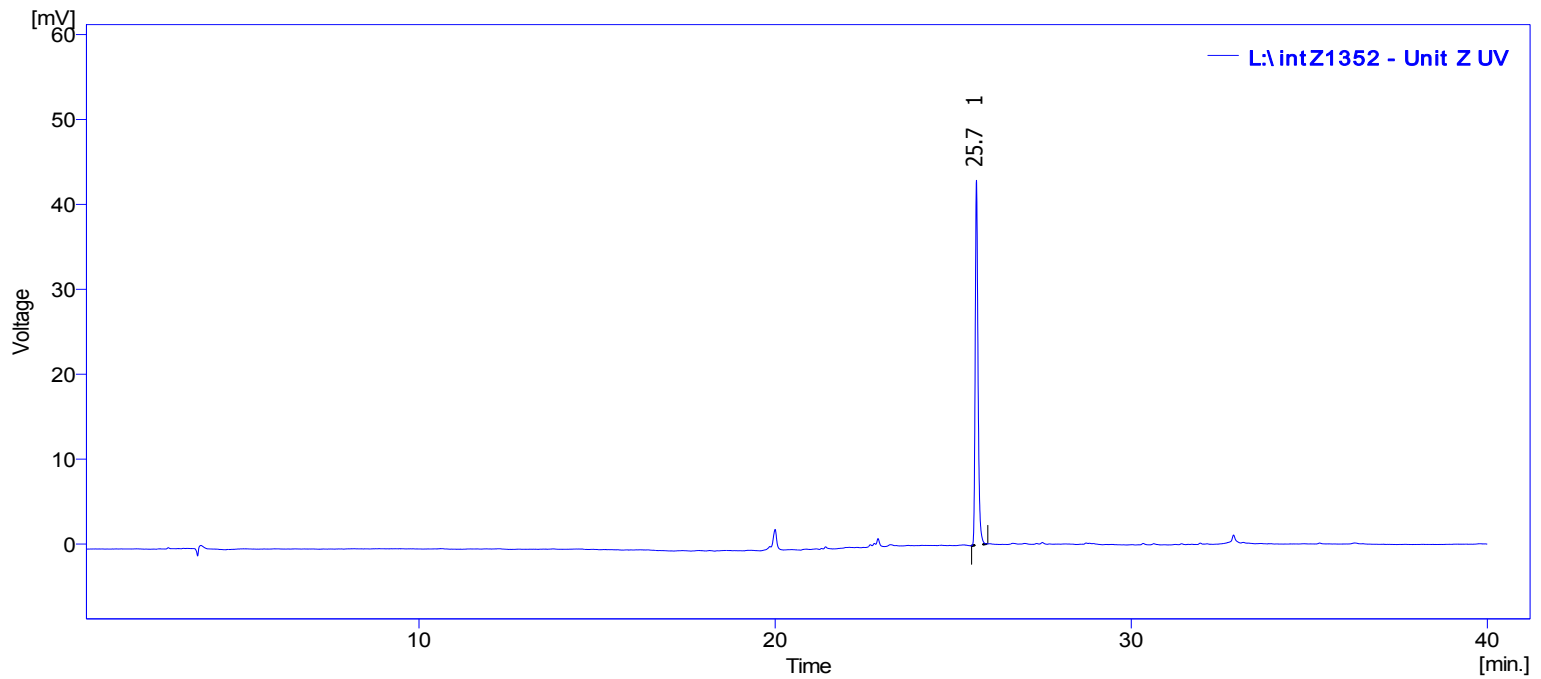
Result Table (Uncal - L:\intZ1352 - Unit Z Radio)

	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		26.06	6564.748	345.38	100.00	100.0	0.28	49375	987500		1.45	
	Total		6564.748	345.38	100.00	100.0						

MC-2244
Eugenol, [ring-14C(U)]-
Lot 265-157-0597-A-20140325-NTO

Chromatogram Info:

File Name	: L:\intZ1352	File Created	: 3/25/2014 12:09:46 PM
Origin	: Acquired, Acquisition started 3/25/2014 11:29:25 AM	Acquired Date	: 3/25/2014 12:09:25 PM
Project	: Work1	By	: Administrator
Method	: Unit_Z_40min_run	By	: Administrator
Description	: UV trace of 14C material alone		
Created	: 8/10/2012 6:18 AM	Modified	: 5/30/2014 2:15 PM
Column	:	Detection	: UV 274nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intZ1352 - Unit Z 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		25.65	233.927	42.98	100.00	100.0	0.08	516647	10332934		1.29	
		Total	233.927	42.98	100.00	100.0						

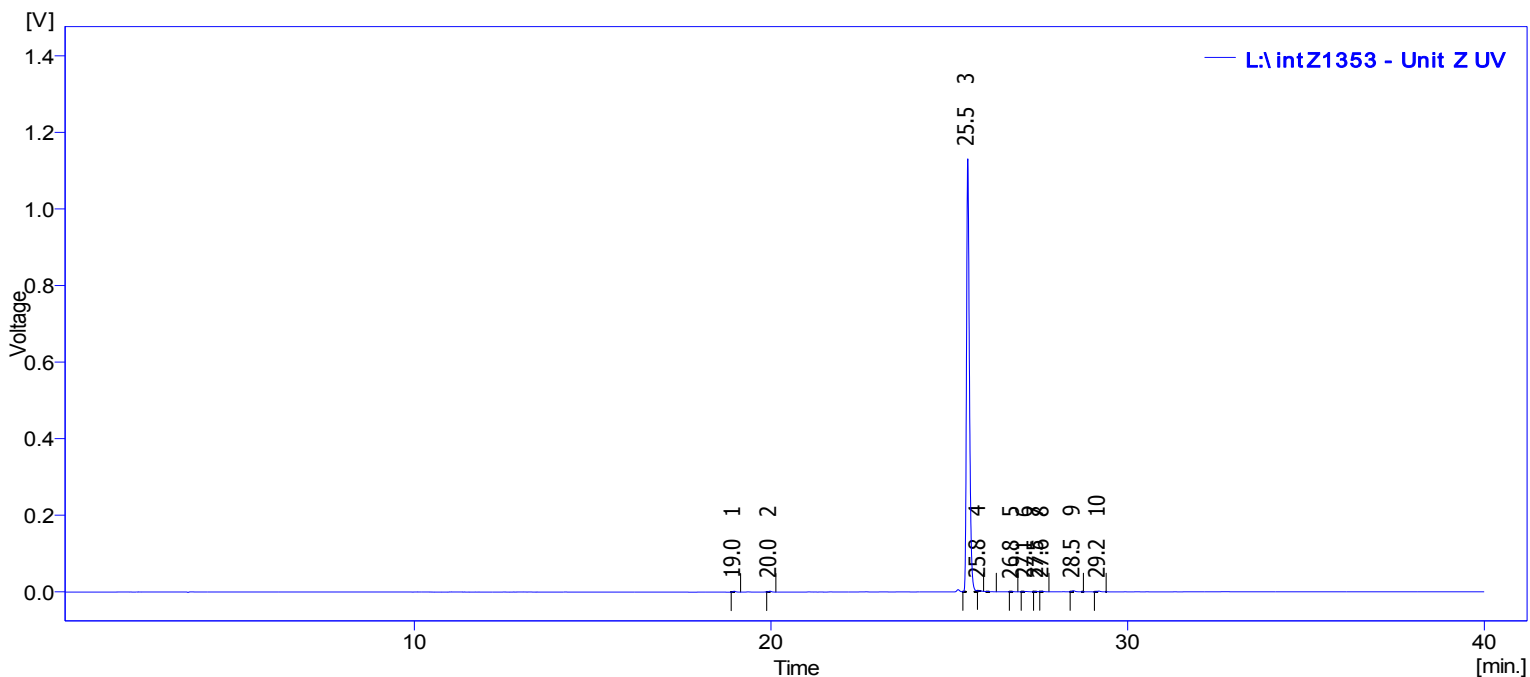
MC-2244
Eugenol, [ring-14C(U)]-
Lot 265-157-0597-A-20140325-NT0

Chromatogram Info:

File Name : L:\intZ1353 File Created : 3/25/2014 1:42:56 PM
 Origin : Acquired, Acquisition started 3/25/2014 1:02:29 PM Acquired Date : 3/25/2014 1:42:31 PM
 Project : Work1 By : Administrator

Method : Unit_Z_40min_run By : Administrator
 Description : UV trace of standard material alone
 Created : 8/10/2012 6:18 AM Modified : 5/30/2014 2:16 PM

Column : Detection : UV 274 nm
 Mobile Phase : Temperature :
 Flow Rate : Pressure :
 Note :



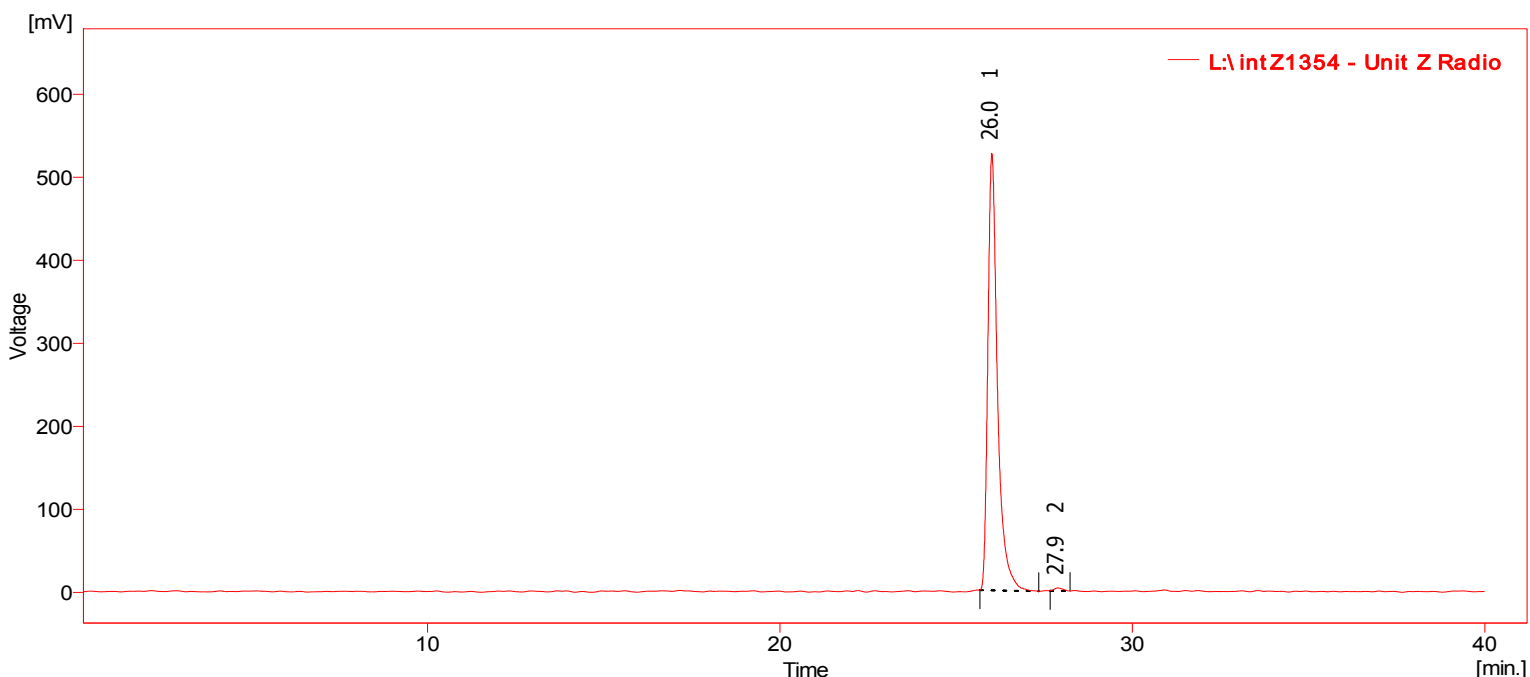
Result Table (Uncal - L:\intZ1353 - Unit Z UV)

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	18.97	12.294	2.37	0.19	0.2	0.08	311439	6228778		1.31	
2	19.97	11.121	2.30	0.17	0.2	0.08	382583	7651660	7.59	1.16	
3	25.52	6455.933	1130.96	98.83	98.8	0.09	465768	9315359	39.89	3.25	
4	25.84	2.153	0.39	0.03	0.0	0.08	577804	11556075	2.25	1.64	
5	26.78	3.154	0.60	0.05	0.1	0.08	562915	11258294	6.76	1.22	
6	27.15	6.680	0.95	0.10	0.1	0.10	377502	7550031	2.33	1.57	
7	27.46	5.028	0.93	0.08	0.1	0.09	539286	10785715	1.89	0.98	
8	27.61	8.809	1.53	0.13	0.1	0.09	545273	10905468	1.02	1.39	
9	28.48	15.628	2.86	0.24	0.2	0.08	636841	12736824	5.98	1.39	
10	29.19	11.675	2.11	0.18	0.2	0.08	668898	13377959	4.97	1.42	
Total		6532.477	1144.99	100.00	100.0						

MC-2244
Eugenol, [ring-14C(U)]-
Lot 265-157-0597-A-20140325-NTO

Chromatogram Info:

File Name	: L:\intZ1354	File Created	: 3/25/2014 2:36:10 PM
Origin	: Acquired, Acquisition started 3/25/2014 1:55:26 PM	Acquired Date	: 3/25/2014 2:35:28 PM
Project	: Work1	By	: Administrator
Method	: Unit_Z_40min_run	By	: Administrator
Description	: Radiochemical trace of 14C material co-injected with standard		
Created	: 8/10/2012 6:18 AM	Modified	: 5/30/2014 2:18 PM
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intZ1354 - Unit Z 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		26.01	10033.760	526.39	99.40	99.3	0.27	50651	1013015		1.59	
2		27.87	60.828	3.64	0.60	0.7	0.28	56497	1129946	4.01	1.27	
	Total		10094.588	530.03	100.00	100.0						

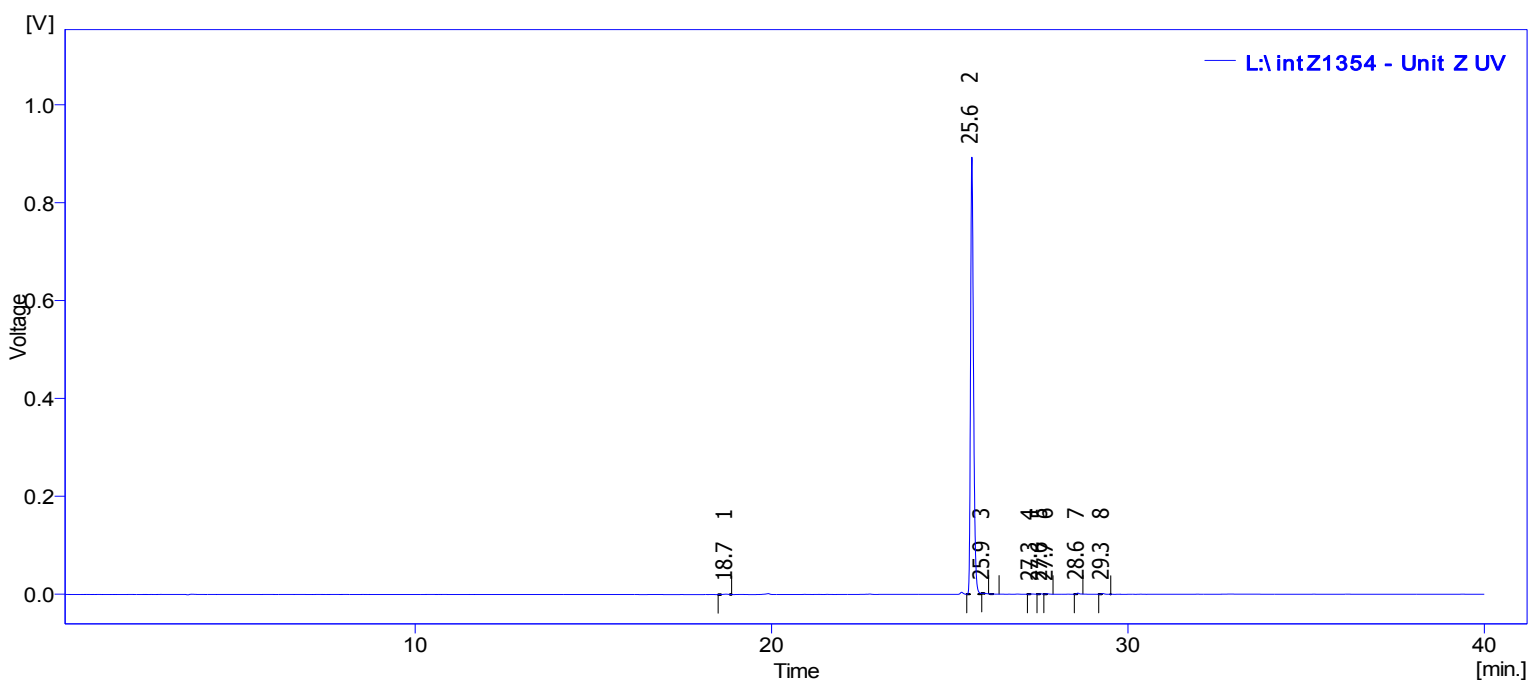
MC-2244
Eugenol, [ring-14C(U)]-
Lot 265-157-0597-A-20140325-NTO

Chromatogram Info:

File Name : L:\intZ1354 File Created : 3/25/2014 2:36:10 PM
 Origin : Acquired, Acquisition started 3/25/2014 1:55:26 PM Acquired Date : 3/25/2014 2:35:28 PM
 Project : Work1 By : Administrator

Method : Unit_Z_40min_run By : Administrator
 Description : UV trace of 14C material co-injected with standard
 Created : 8/10/2012 6:18 AM Modified : 5/30/2014 2:17 PM

Column : Detection : UV 274 nm
 Mobile Phase : Temperature :
 Flow Rate : Pressure :
 Note :



Result Table (Uncal - L:\intZ1354 - Unit Z 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		18.72	8.189	0.79	0.16	0.1	0.17	65652	1313047		0.85	
2		25.62	5179.589	893.15	99.11	99.2	0.09	469573	9391450	31.30	3.12	
3		25.94	2.043	0.29	0.04	0.0	0.08	645191	12903828	2.27	2.20	
4		27.28	4.746	0.69	0.09	0.1	0.11	353469	7069374	8.62	1.55	
5		27.56	5.112	0.79	0.10	0.1	0.11	360867	7217333	1.55	0.83	
6		27.72	6.993	1.22	0.13	0.1	0.09	549865	10997303	0.96	1.26	
7		28.59	10.530	2.16	0.20	0.2	0.08	707651	14153011	6.10	1.14	
8		29.29	9.159	1.61	0.18	0.2	0.09	613822	12276441	4.92	1.43	
		Total	5226.360	900.69	100.00	100.0						

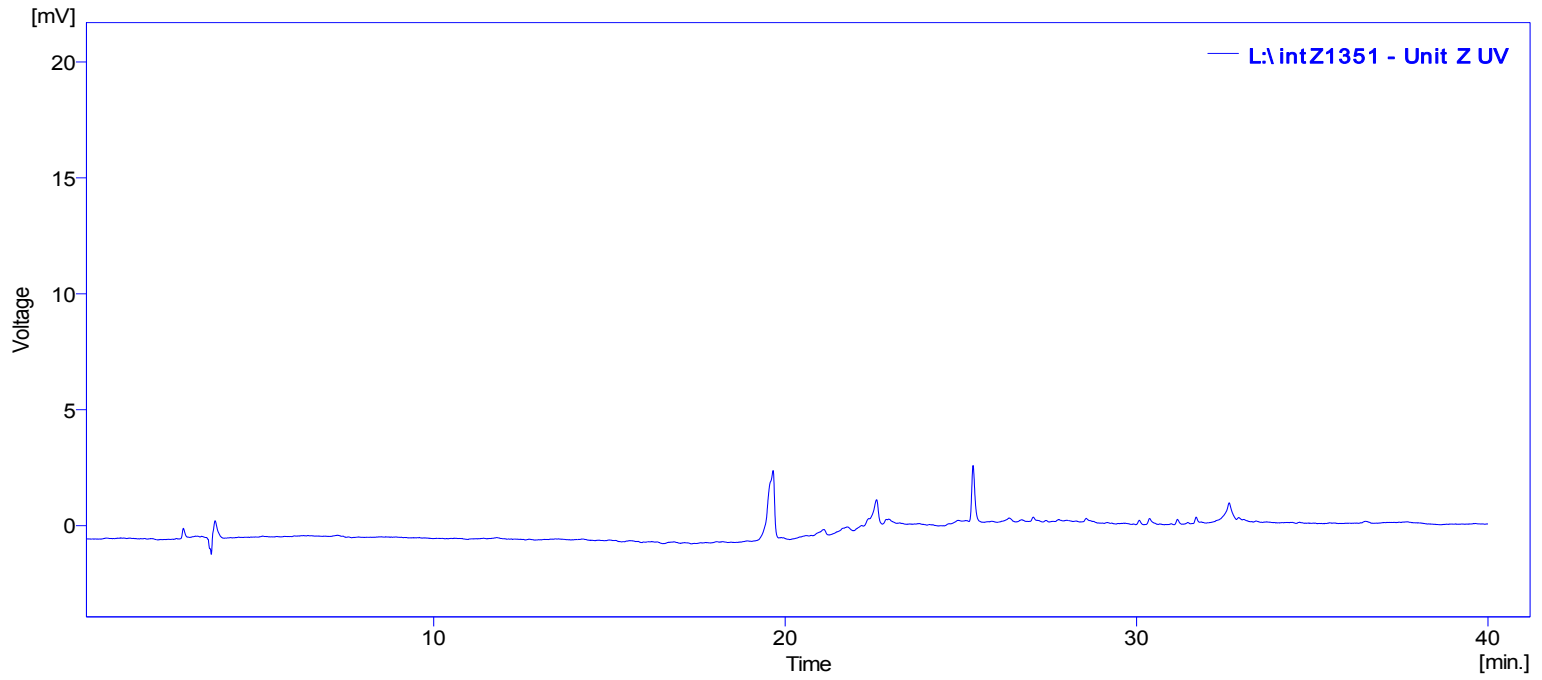
MC-2244
Eugenol, [ring-14C(U)]-
Lot 265-157-0597-A-20140325-NTO

Chromatogram Info:

File Name : L:\intZ1351 File Created : 3/25/2014 11:16:58 AM
 Origin : Acquired, Acquisition started 3/25/2014 10:36:40 AM Acquired Date : 3/25/2014 11:16:41 AM
 Project : Work1 By : Administrator

Method : Unit_Z_40min_run By : Administrator
 Description : UV trace of blank injection
 Created : 8/10/2012 6:18 AM Modified : 5/30/2014 2:18 PM

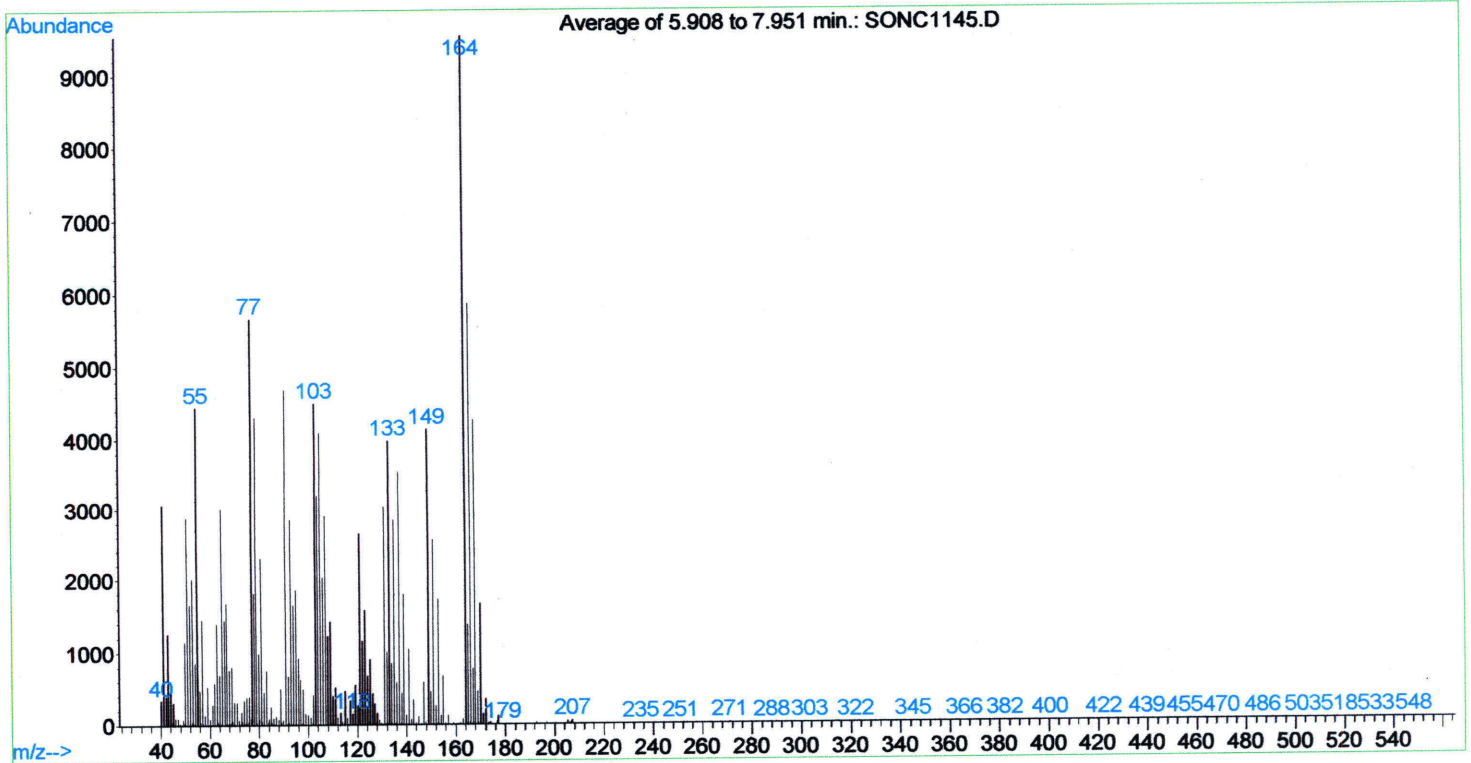
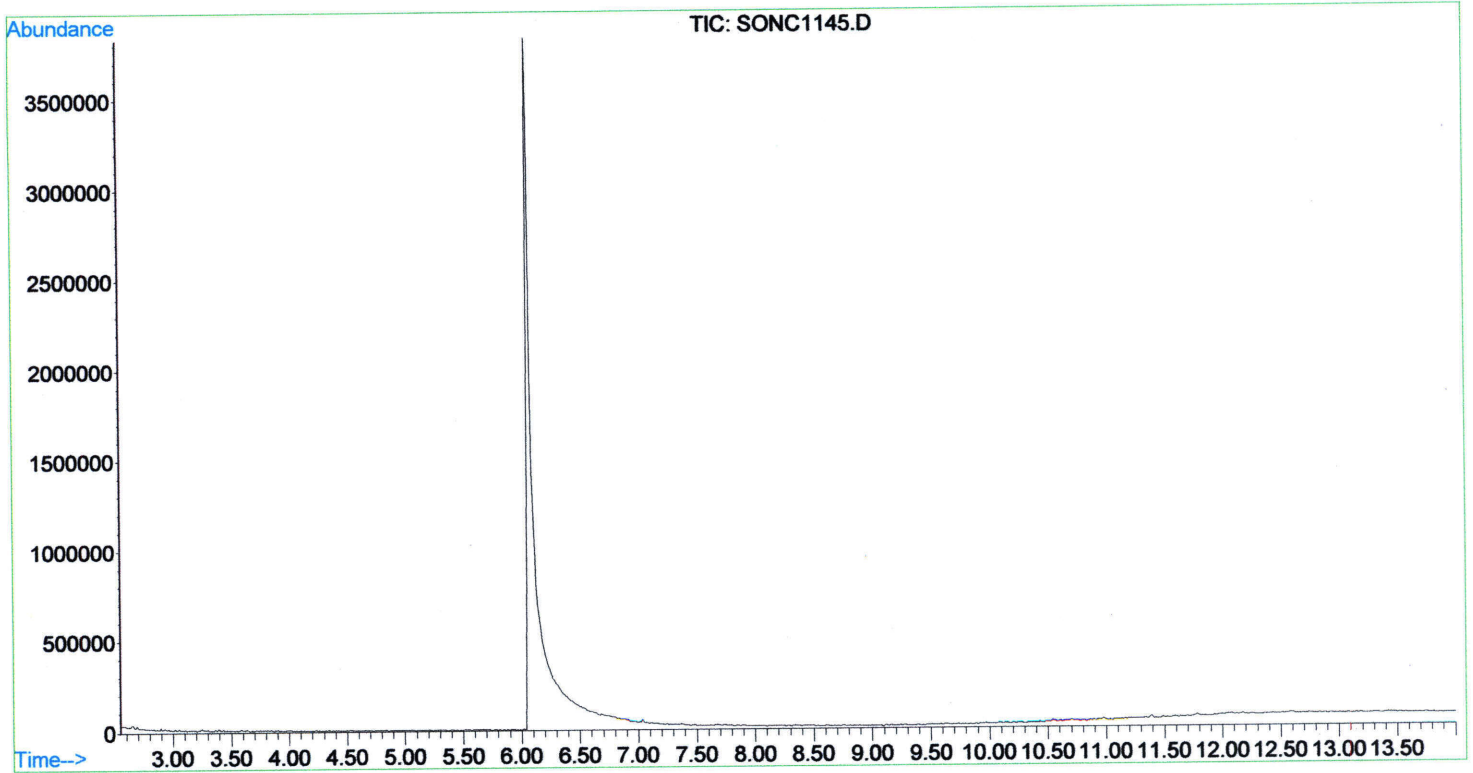
Column : Detection : UV 274 nm
 Mobile Phase : Temperature :
 Flow Rate : Pressure :
 Note :



Result Table (Uncal - L:\intZ1351 - Unit Z 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											

File : C:\HPCHEM1\DATA\SONC1145.D
Operator : aa
Acquired : 25 Mar 2014 1:18 pm using AcqMethod DEFAULT
Instrument : GC/MS Ins
Sample Name: eugenol, [14C(U)]-
Misc Info : 20140325-NT0
Vial Number: 1



MC2244 1H NMR in CD2Cl2
Batch 20140325-NTO



6.814
6.795
6.728
6.691
6.671
5.983
5.960
5.942
5.528
5.106
5.065
5.040
3.878
3.458
3.41
3.336
3.321

NAME MC2244
EXPNO 1
PROCNO 1
Date_ 20140325
Time 13.09
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT CD2Cl2
NS 256
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 322.5
DM 62.400 usec
DE 6.50 usec
TE 293.9 K
D1 1.00000000 sec
TD0 1

==== CHANNEL f1 =====
NUC1 1H
P1 14.00 usec
PL1 -1.00 dB
PL1W 10.75174427 W
SFO1 400.1324710 MHz
SI 32768
SF 400.1300080 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

