



INDOFINE Chemical Company, Inc.

121 Stryker Lane, Bldg. 30, Suite 1 • Hillsborough, NJ 08844 • U.S.A.

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

website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com

CERTIFICATE OF ANALYSIS

Catalog Number: 020104S

Product Name: **GINSENOSIDE Rb2 with HPLC**

Chemical Family: Saponins

Cas Number: [11021-13-9]

Lot Number: 1309383

Chemical Formula: $C_{53}H_{90}O_{22}$

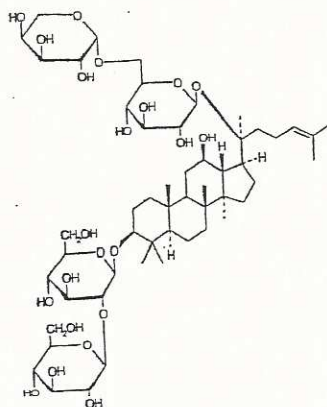
Molecular Weight: 1079.29

Appearance: White powder

NMR Spectrum: Enclosed

Storage: This product is stable at ambient temperature for several weeks. However, optimum long-term storage may require lower temperature ($<-18^{\circ}\text{C}$). Place in a desiccator under vacuum before use.

Purity(HPLC): 99.9%





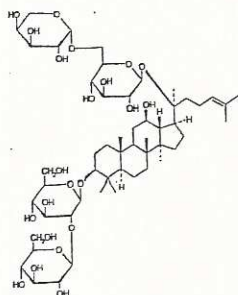
INDOFINE Chemical Company, Inc.

121 Stryker Lane, Bldg. 30, Suite 1 • Hillsborough, NJ 08844 • U.S.A.

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

website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com



HPLC ANALYSIS

Catalog No.: 020104S

Product Name: Ginsenoside Rb2

Lot No.: 1309383

SAMPLE INFORMATION

Sample Name: Ginsenoside Rb2

Sample Type: Unknown

Vial: 1:F,6

Injection #: 1

Injection Volume: 10.00 ul

Run Time: 22.0 Minutes

Sample Set Name:

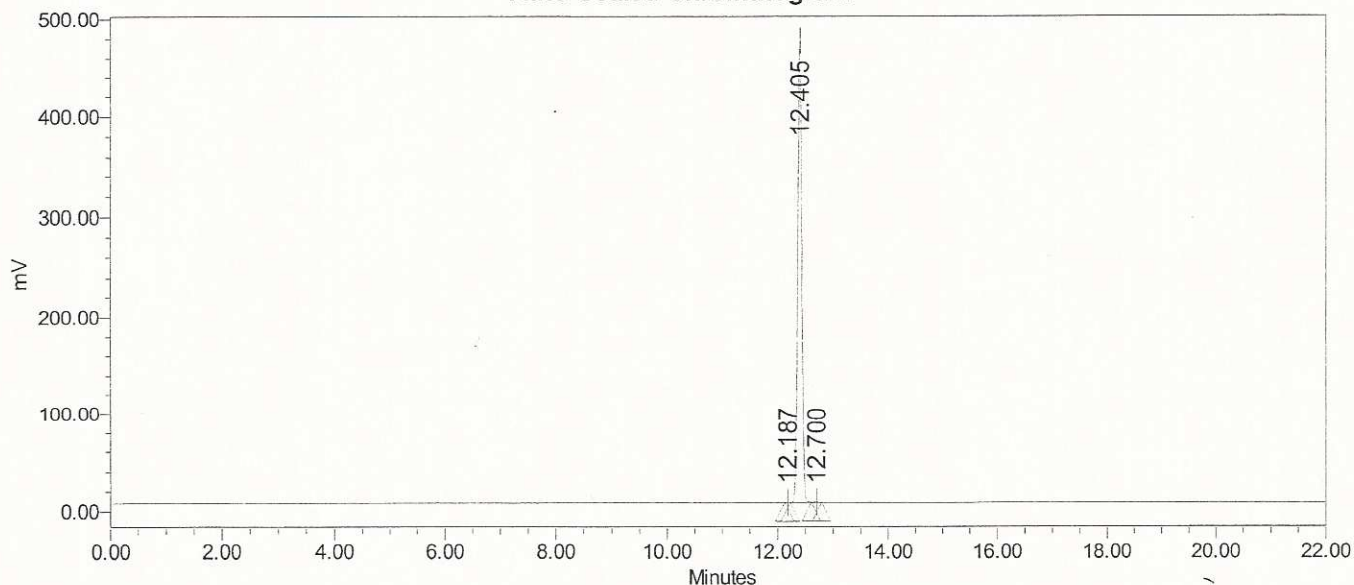
Acq. Method Set: Ginsenoside Rb2

Processing Method: Samples

Channel Name: SATIN

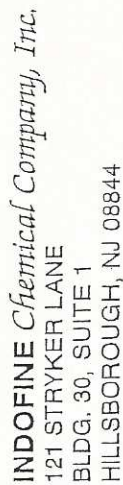
Proc. Chnl. Descr.:

Auto-Scaled Chromatogram

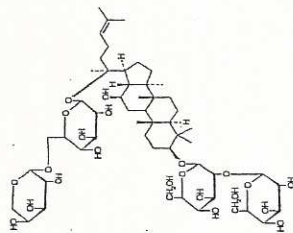


Peak Results

	Name	RT	Area	% Area	USP Plate Count	USP Resolution
1		12.187	249	0.01	240827.78	
2		12.405	2336293	99.97	144179.24	1.60
3		12.700	494	0.02	77424.39	2.09



Catalog No.: 020104S
Product Name: Ginsenoside Rb2
Lot No.: 1309383



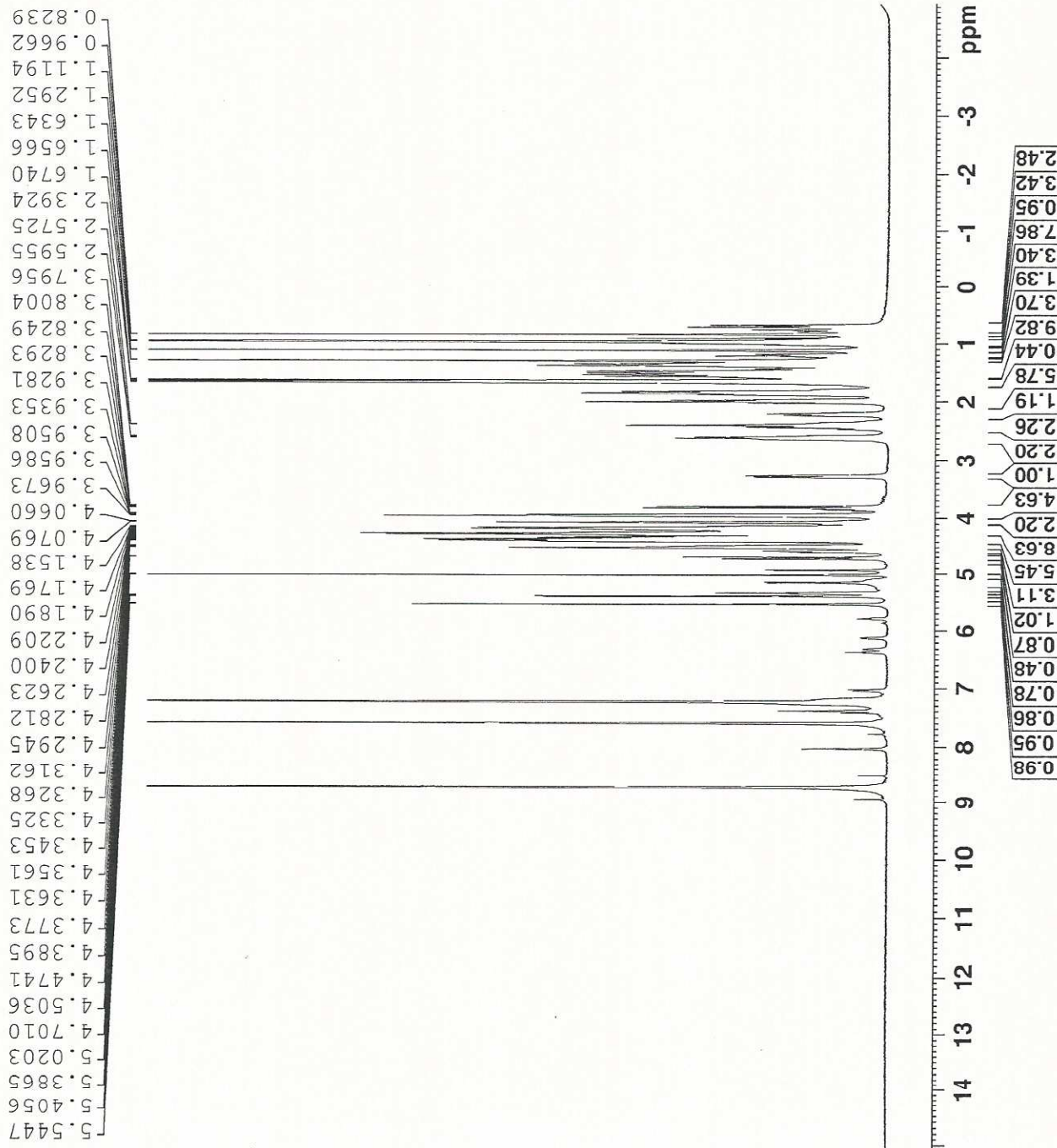
```
GRB2
PROTON Pyr {E:\nmrdata\lizyun} nmr 5
```

Current Data Parameters	
NAME	09142013
EXPNO	3
PROCNO	1

F2 - Acquisition Parameters	
Date_	20130914
Time	21.28
INSTRUM	spect
PROBHD	5 mm PABBO BB-
PULPROG	zgpr
TD	65536
SOLVENT	Py
NS	32
DS	2
SWH	8012.820 Hz
FIDRES	0.122266 Hz
AQ	4.0894465 sec
RG	114
DW	62.400 usec
DE	6.50 usec
TE	298.2 K
D1	1.00000000 sec
D12	0.00002000 sec
TD0	1

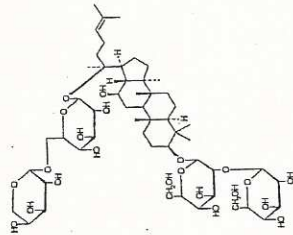
```
===== CHANNEL f1 =====
SSFO1 400.1320085 MHz
NUC1 1H
P1 12.95 usec
PLW1 15.00000000 W
PLW9 0.00010000 W
```

F2 - Processing parameters	
SSI	65536
SSF	400.1299857 MHz
WDW	EM
SSB	0
ILB	0.30 Hz
GB	0
PC	1.00





INDOFINE Chemical Company, Inc.
121 STRYKER LANE
BLDG. 30, SUITE 1
HILLSBOROUGH, NJ 08844



Catalog No.: 020104S
Product Name: Ginsenoside Rb2
Lot No.: 1309383

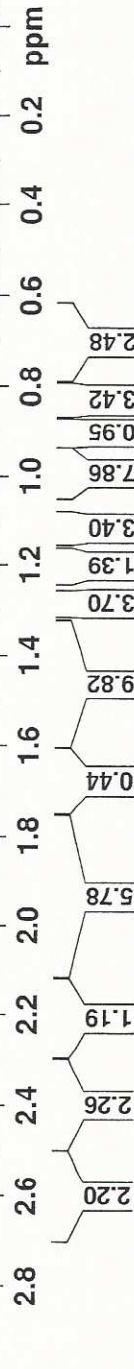
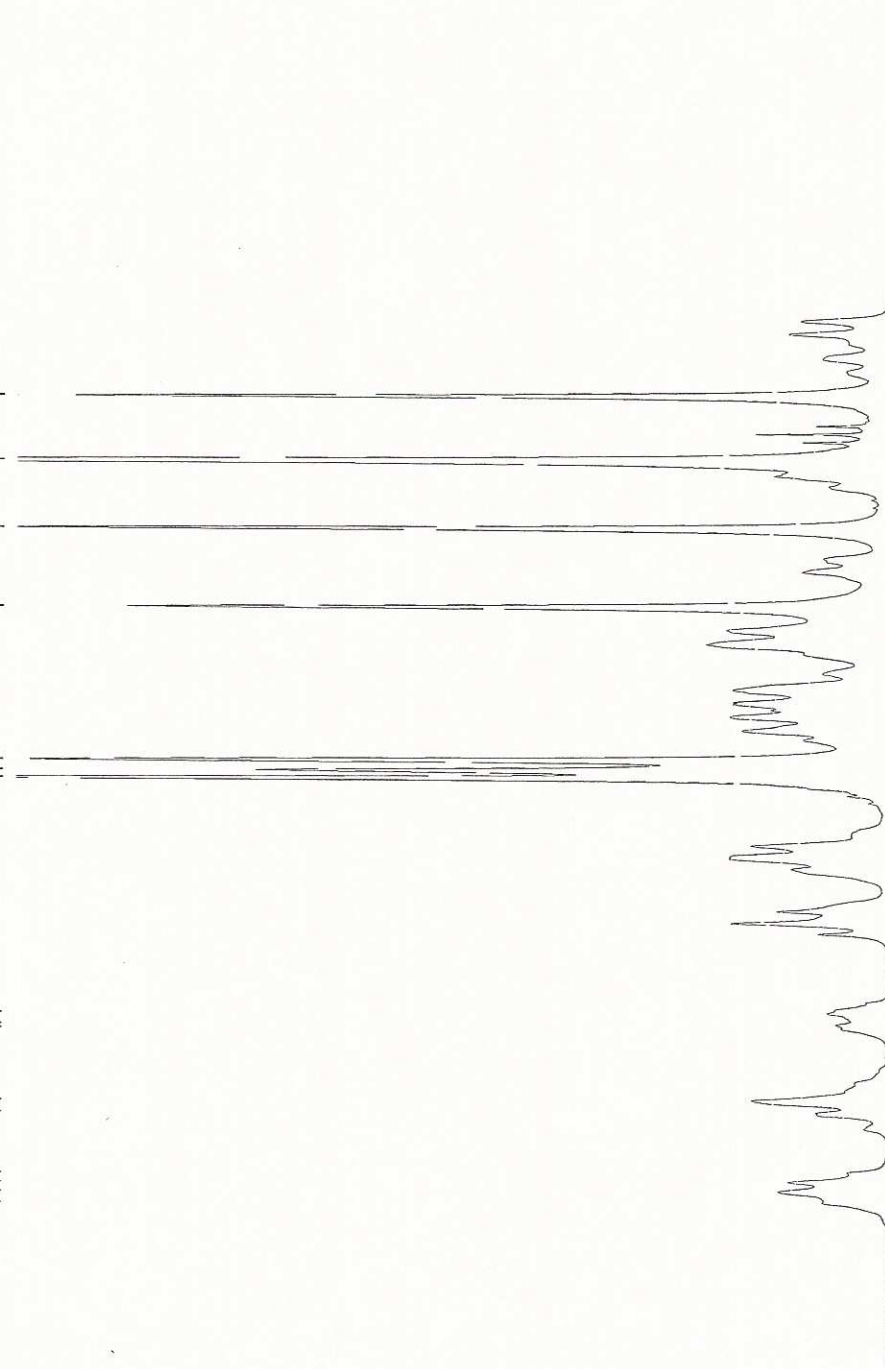
GRB2
PROTON Pyr {E:\nmrdata\lizeyun} nmr 5



2.6198
2.5955
2.5725
2.5488
2.4178
2.3924
2.3333
2.2248
2.2000

1.6740
1.6566
1.6343

1.2952
1.1194
0.9662
0.8239

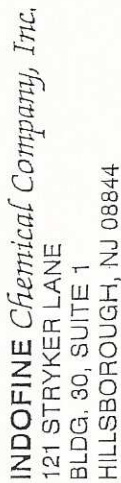


Current Data Parameters
NAME 09142013
EXPNO 3
PROCNO 1

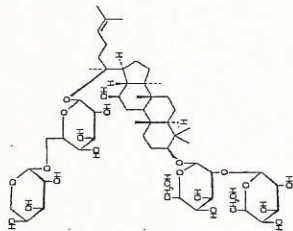
F2 - Acquisition Parameters
Date_ 20130914
Time 21.28
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg
TD 65536
SOLVENT Pyr
NS 32
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894465 sec
RG 114
DW 62.400 usec
DE 6.50 usec
TE 298.2 K
D1 1.00000000 sec
D12 0.00002000 sec
TD0 1

==== CHANNEL f1 =====
SFO1 400.1320085 MHz
NUC1 1H
P1 12.95 usec
PLW1 15.00000000 W
PLW9 0.00010000 W

F2 - Processing parameters
SI 65536
SF 400.1299857 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



INDOFINE Chemical Company, Inc.
121 STRYKER LANE
BLDG. 30, SUITE 1
HILLSBOROUGH, NJ 08844



Catalog No.: 020104S
Product Name: Ginsenoside Rb2
Lot No.: 1309383



GRB 2

```
PROTON Pyr {E:\nmrdata\lizevun} nmr 5
```

Current Data Parameters

NAME	09142013
EXPNO	3
PROCNO	1

F2 - Acquisition Parameters	
Date_	20130914
Time	21.28
INSTRUM	spect
PROBHD	5 mm PABBO BB-
PULPROG	zgpr
TD	65536
SOLVENT	Pyr
NS	32
DS	2
SMH	8012.820 Hz
FIDRES	0.1222266 Hz
AQ	4.0894465 sec
RG	114
OW	62.400 usec
DE	6.50 usec
TE	298.2 K
d1	1.00000000 sec
d12	0.00002000 sec
TD0	1

```
===== CHANNEL f1 =====
SFO1 400.1320085 MHz
NUC1 1H
P1 12.95 usec
PLW1 15.00000000 W
PLW9 0.00010000 W
```

F2 - Processing parameters	
SI	65536
SF	400.1299857 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	
PC	1.00

