



812 Meadowlark Lane, Goodlettsville, TN 37072
Telephone: 615-239-8604

Certificate of Analysis

1960 Highway
1200 Meadowlark Lane
Goodlettsville, TN 37072

Product Name	Ostarine	Client Lot Number	IRC-OST-1
Report Date	03/13/17	Laboratory #	8301

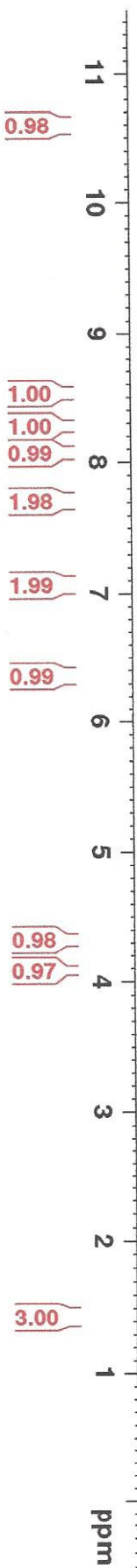
Description	Method	Result
Identification	Proton NMR	Positive
Ostarine	HPLC	99.7%

Collin Thomas 
Laboratory Manager

03/13/2017 3/13/17
Date

The result(s) stated in this report is only for the sample submitted. This report may not be reproduced in whole or in part, nor may any reference be made to the work, the result, or the company in any news release, public announcements or advertising without our prior written consent.

**¹H NMR of Ostarine
 in DMSO
 Lot # 8301
 Colmaric Analytical
 400 MHz
 03-08-17**

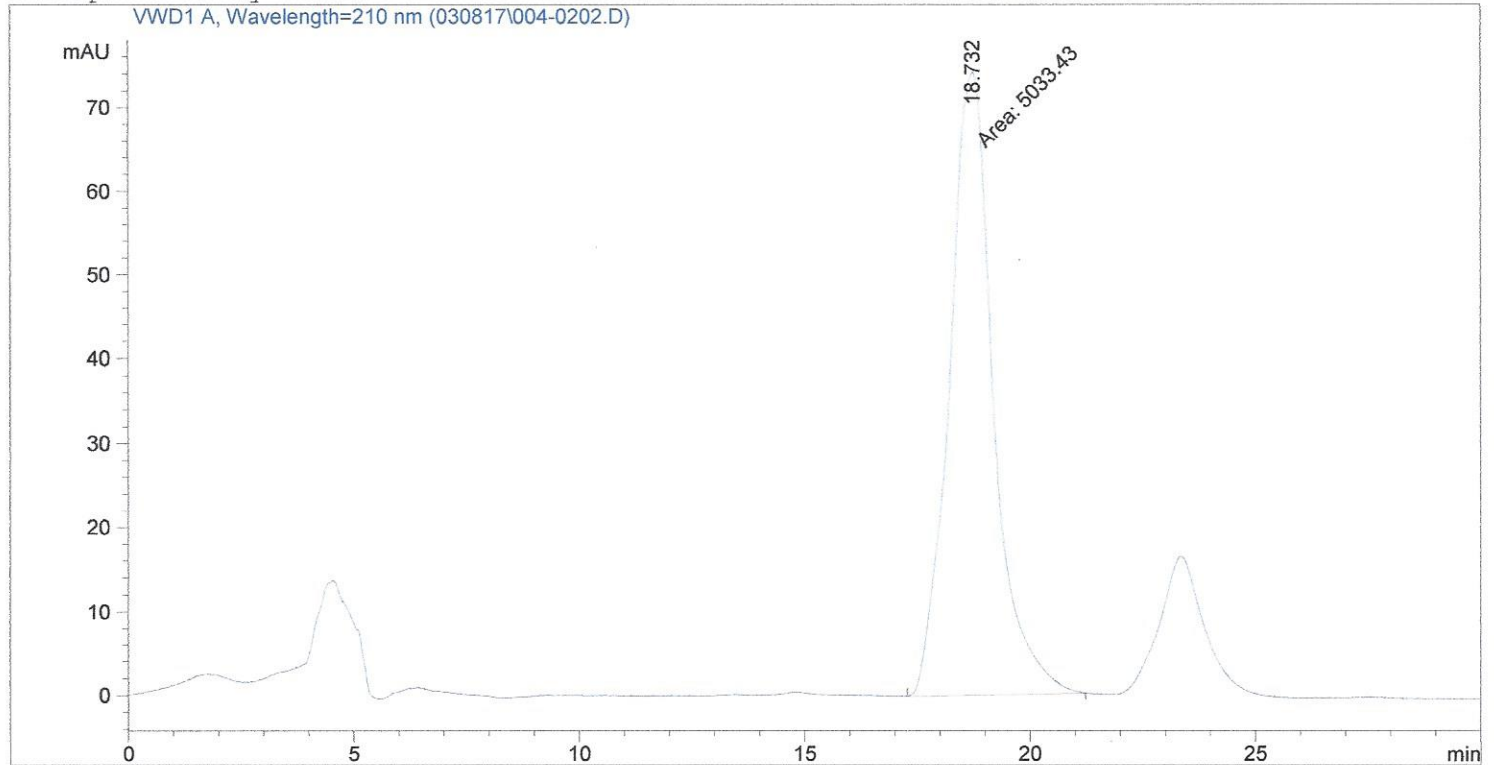


Current Parameters
 NAME Mar98-2017-colmaric
 EXPNO 9
 PROCNO 1
 F2 - Acquisition Parameters
 Date_ 20170308
 Time 15.42
 INSTRUM spect
 PROBRD 5 mm PASO BB-
 PULPROG zg30
 TD 32768
 SOLVENT DMSO
 NS 32
 DS 0
 SMH 5208.233 Hz
 FIDRES 0.158946 Hz
 AQ 3.1457281 sec
 RG 71.8
 DW 96.000 usec
 DE 25.61 usec
 TE 298.0 K
 D1 1.50000000 sec
 ID0 1
 CHANNEL F1
 NUC1 ¹H
 P1 11.38 usec
 PL -2.30 dB
 FLLW 18.35863398 W
 SFO1 400.1320007 MHz
 F2 - Processing parameters
 SI 32768
 SF 400.1300059 MHz
 WDW EM

```
=====
Injection Date   : 3/8/2017 9:41:30 AM      Seq. Line   :    2
Sample Name     : Ostarine Std              Location    : Vial 4
Acq. Operator   : Newman                   Inj         :    2
                                           Inj Volume  : 10 µl

Acq. Method     : C:\HPCHEM\1\METHODS\TIANEPTN.M
Last changed    : 3/8/2017 8:24:19 AM by Newman
Analysis Method : C:\HPCHEM\1\METHODS\TIANEPTN.M
Last changed    : 3/8/2017 3:18:35 PM by Newman
                  (modified after loading)
=====
```

Tianeptine assay



```
=====
External Standard Report
=====
```

```
Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: VWD1 A, Wavelength=210 nm

```
=====
Area Percent Report
=====
```

```
Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: VWD1 A, Wavelength=210 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	18.732	MM	1.1304	5033.42676	74.21450	100.0000

Totals : 5033.42676 74.21450

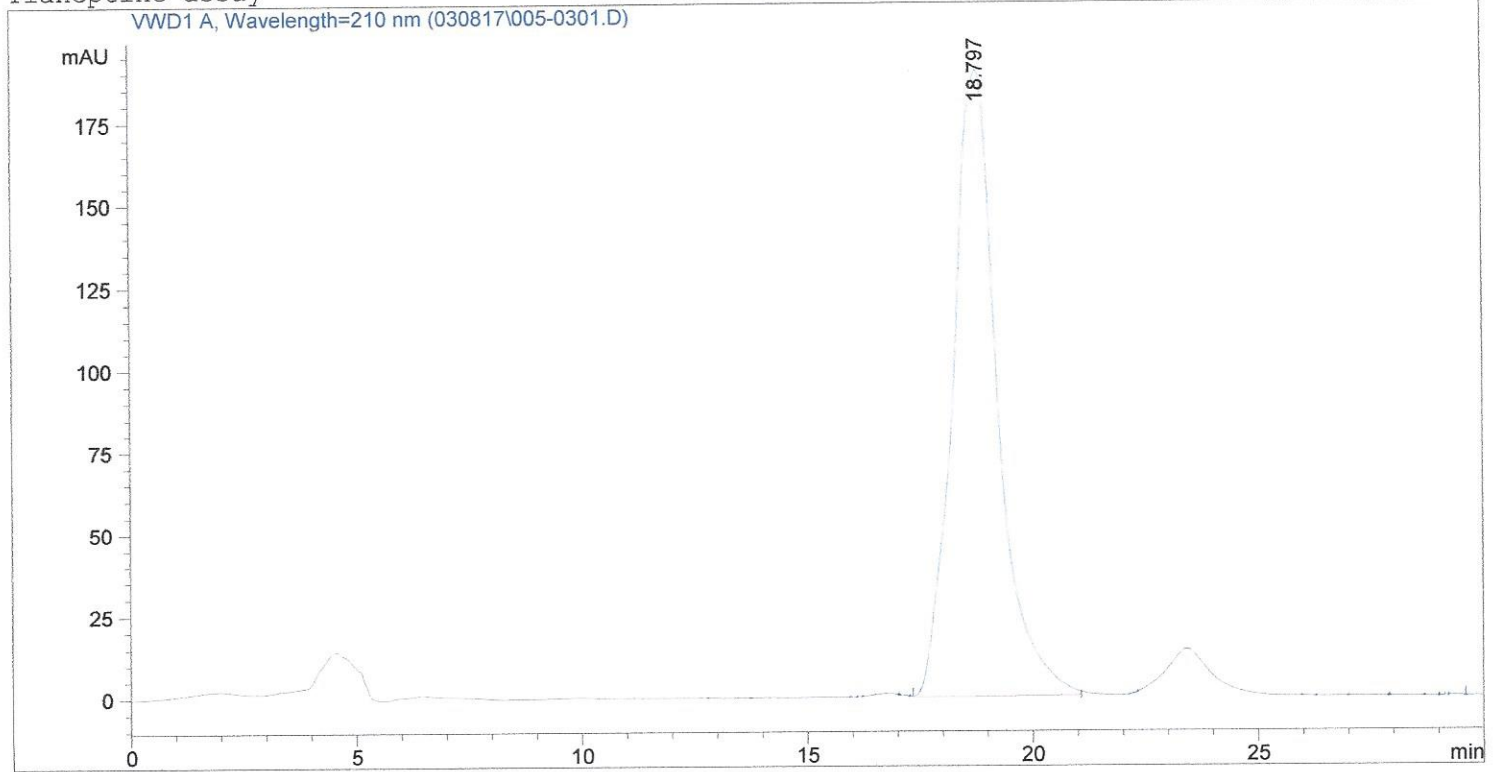
Results obtained with enhanced integrator!

=====
*** End of Report ***

```
=====
Injection Date   : 3/8/2017 10:42:39 AM      Seq. Line   :    3
Sample Name     : IRC_OST-1                  Location    : Vial 5
Acq. Operator  : Newman                      Inj        :    1
                                           Inj Volume  : 10 µl

Acq. Method    : C:\HPCHEM\1\METHODS\TIANEPTN.M
Last changed   : 3/8/2017 8:24:19 AM by Newman
Analysis Method : C:\HPCHEM\1\METHODS\TIANEPTN.M
Last changed   : 3/8/2017 3:18:35 PM by Newman
                (modified after loading)
=====
```

Tianeptine assay



```
=====
External Standard Report
=====
```

```
Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: VWD1 A, Wavelength=210 nm

```
=====
Area Percent Report
=====
```

```
Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: VWD1 A, Wavelength=210 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	18.797	VV	0.8111	1.30842e4	190.06805	100.0000

Totals : 1.30842e4 190.06805

Results obtained with enhanced integrator!

=====
*** End of Report ***