

# S & N LABS

2021 E. Fourth Street

Santa Ana, California 92705

(714) 543-2211

14 April 2017

Job Number:	21563b
PO Number:	Verbal


Chemyo LLC  
226 West Bourne Way  
Millsboro, Delaware 19966

## REPORT OF ANALYSIS

One sample of powder labeled "MK677" was received on 17 March 2017. The sample was analyzed using Fourier transform infrared spectroscopy (FTIR) and using high-performance liquid chromatography (HPLC) with ultraviolet (UV) detection at 220 nm. The sample was additionally analyzed using gas chromatography with mass spectroscopic detection (GC-MS) and using liquid chromatography with mass spectroscopic detection (LC-MS). The findings are provided in the table below.

Sample	Primary Composition	Percent Purity by LC
MK677	N-[1(R)-1,2-Dihydro-1-methanesulfonylspiro-3H-indole-3,4'-piperidin-1'-yl]carbonyl-2-(phenylmethoxy)-ethyl-2-amino-2-methylpropanamide methanesulfonate	99.0

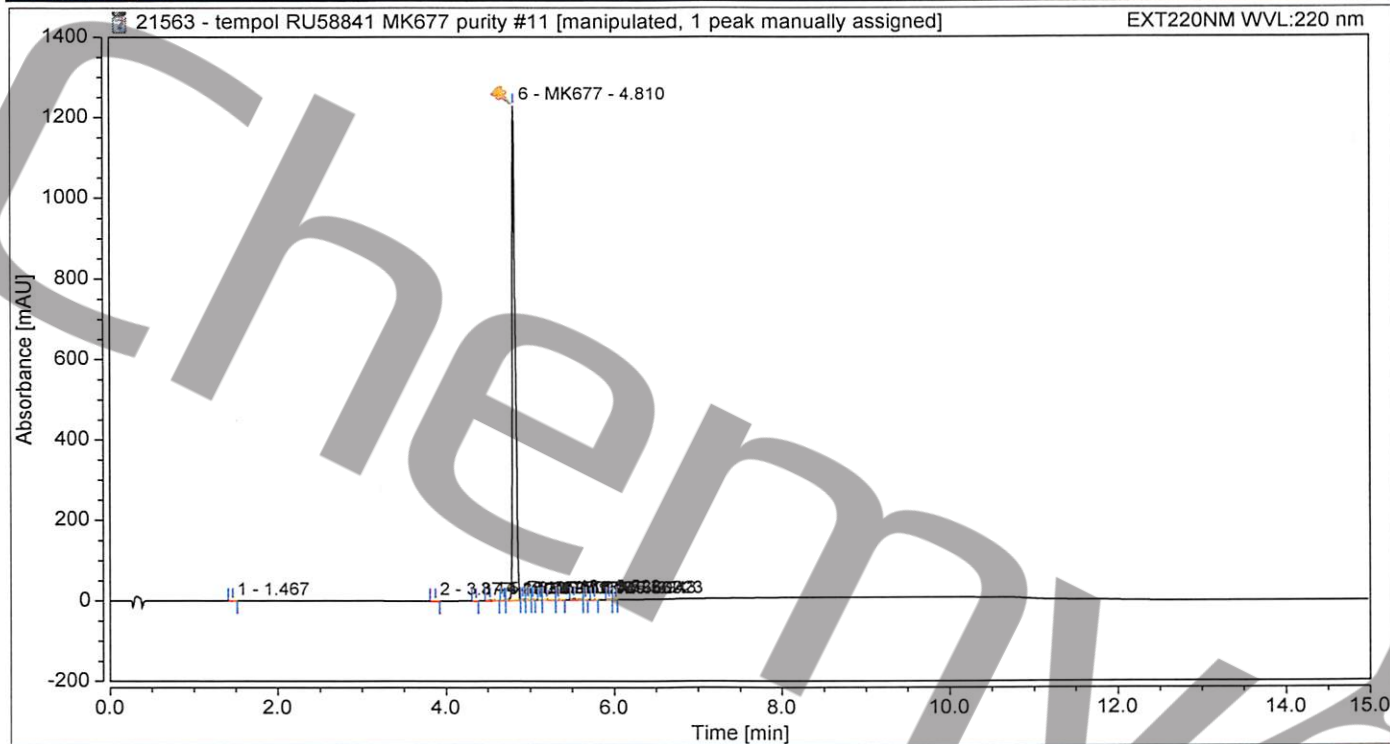
The spectrum is enclosed for your reference.

  
Chris French, PhD  
Sr. Chemist

## Chromatogram and Results

Injection Details		
Injection Name:	MK677 purity	Run Time (min): 15.00
Vial Number:	GA4	Injection Volume: 5.00
Injection Type:	Unknown	Channel: EXT220NM
Calibration Level:		Wavelength: 210.0
Instrument Method:	21563 - tempol RU58841 MK677 purity	Bandwidth: 10
Processing Method:	21563 - tempol RU58841 MK677 purity	Dilution Factor: 1.0000
Injection Date/Time:	23/Mar/17 12:54	Sample Weight: 1.0000

### Chromatogram



### Integration Results

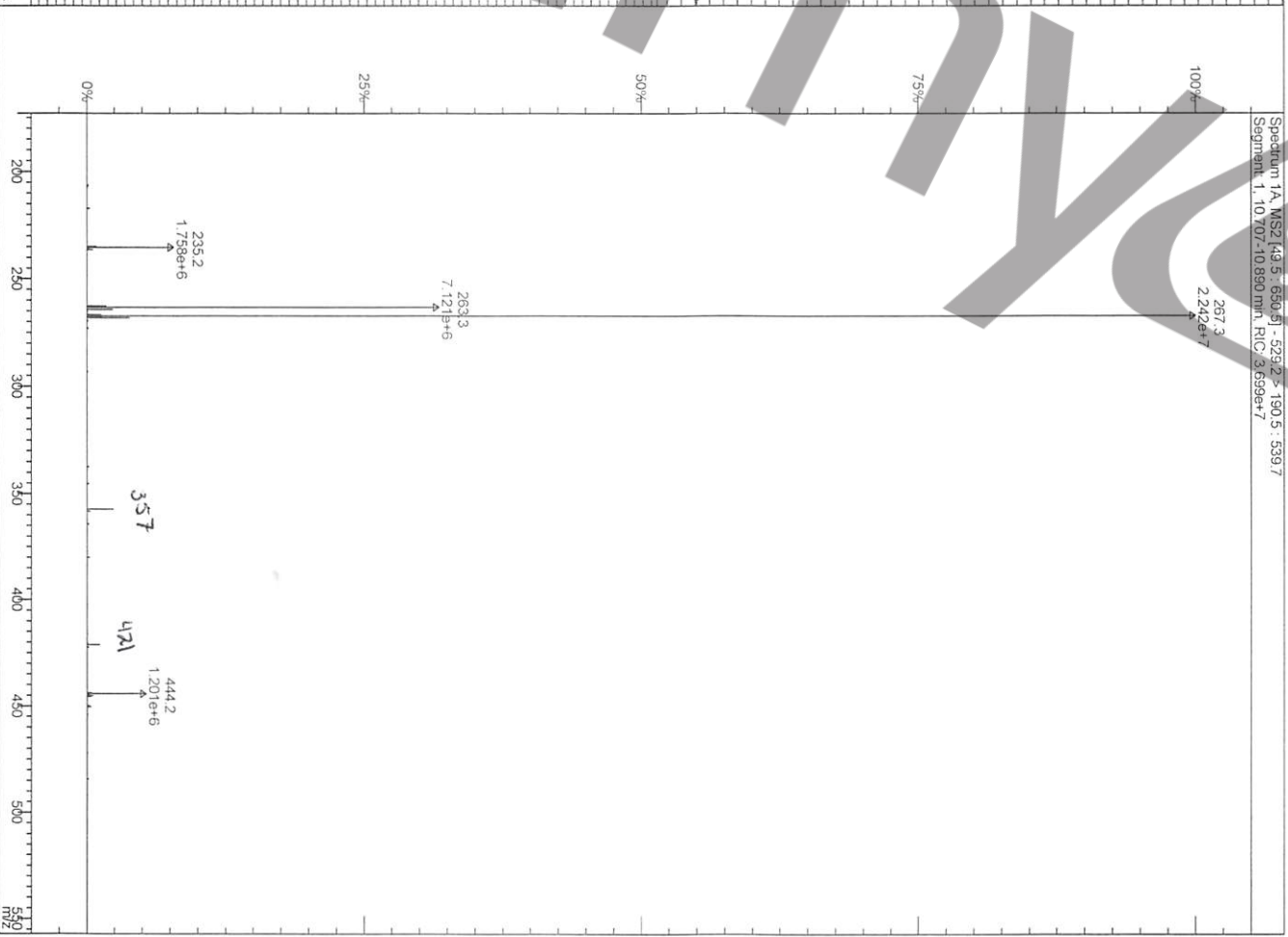
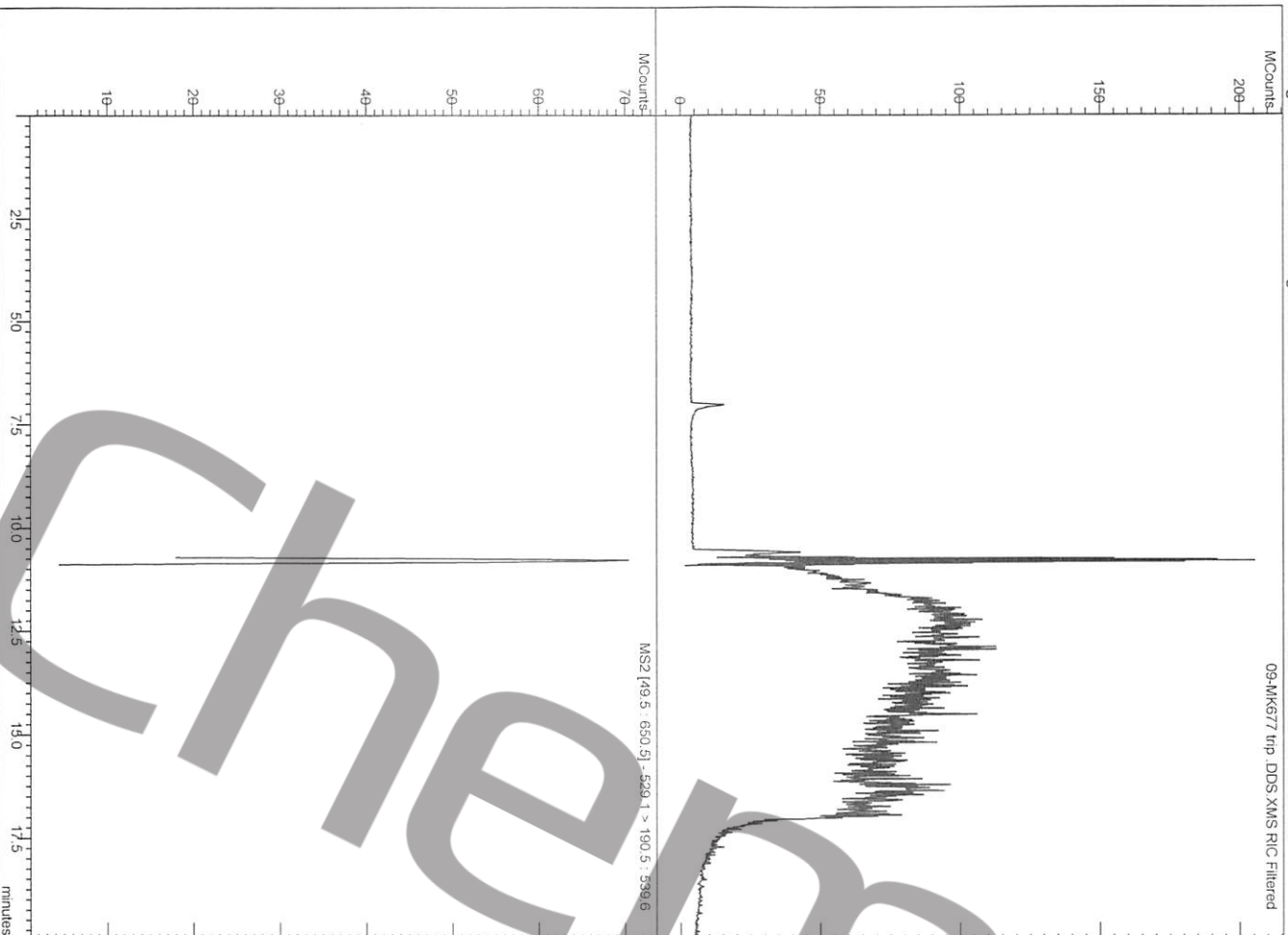
No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount µg/ml
1		1.467	0.002	0.037	0.00	0.00	n.a.
2		3.877	0.006	0.104	0.01	0.01	n.a.
3		4.360	0.015	0.361	0.03	0.03	n.a.
4		4.530	0.097	1.614	0.19	0.13	n.a.
5		4.697	0.009	0.371	0.02	0.03	n.a.
6	MK677	4.810	51.461	1226.965	98.95	98.91	n.a.
7		4.917	0.058	1.708	0.11	0.14	n.a.
8		4.983	0.030	0.881	0.06	0.07	n.a.
9		5.040	0.017	0.745	0.03	0.06	n.a.
10		5.127	0.011	0.504	0.02	0.04	n.a.
11		5.200	0.074	0.958	0.14	0.08	n.a.
12		5.340	0.053	1.115	0.10	0.09	n.a.
13		5.523	0.144	4.114	0.28	0.33	n.a.
14		5.660	0.003	0.117	0.01	0.01	n.a.
15		5.767	0.019	0.549	0.04	0.04	n.a.
16		5.943	0.006	0.151	0.01	0.01	n.a.
17		6.023	0.004	0.137	0.01	0.01	n.a.
Total:			52.009	1240.429	100.00	100.00	

# MS Data Review All Plots - 4/13/2017 9:57 AM

File: c:\varian\ms\data\21563 - api identification\09-mk677 trip .dds.xms  
Sample: 09-MK677 trip  
Scan Range: 1 - 1540 Time Range: 0.00 - 19.99 min.

Operator: DRC  
Date: 4/13/2017 9:09 AM

09-MK677 trip DDS XMS RIC Filtered



### MS Data Review All Plots - 4/13/2017 9:57 AM

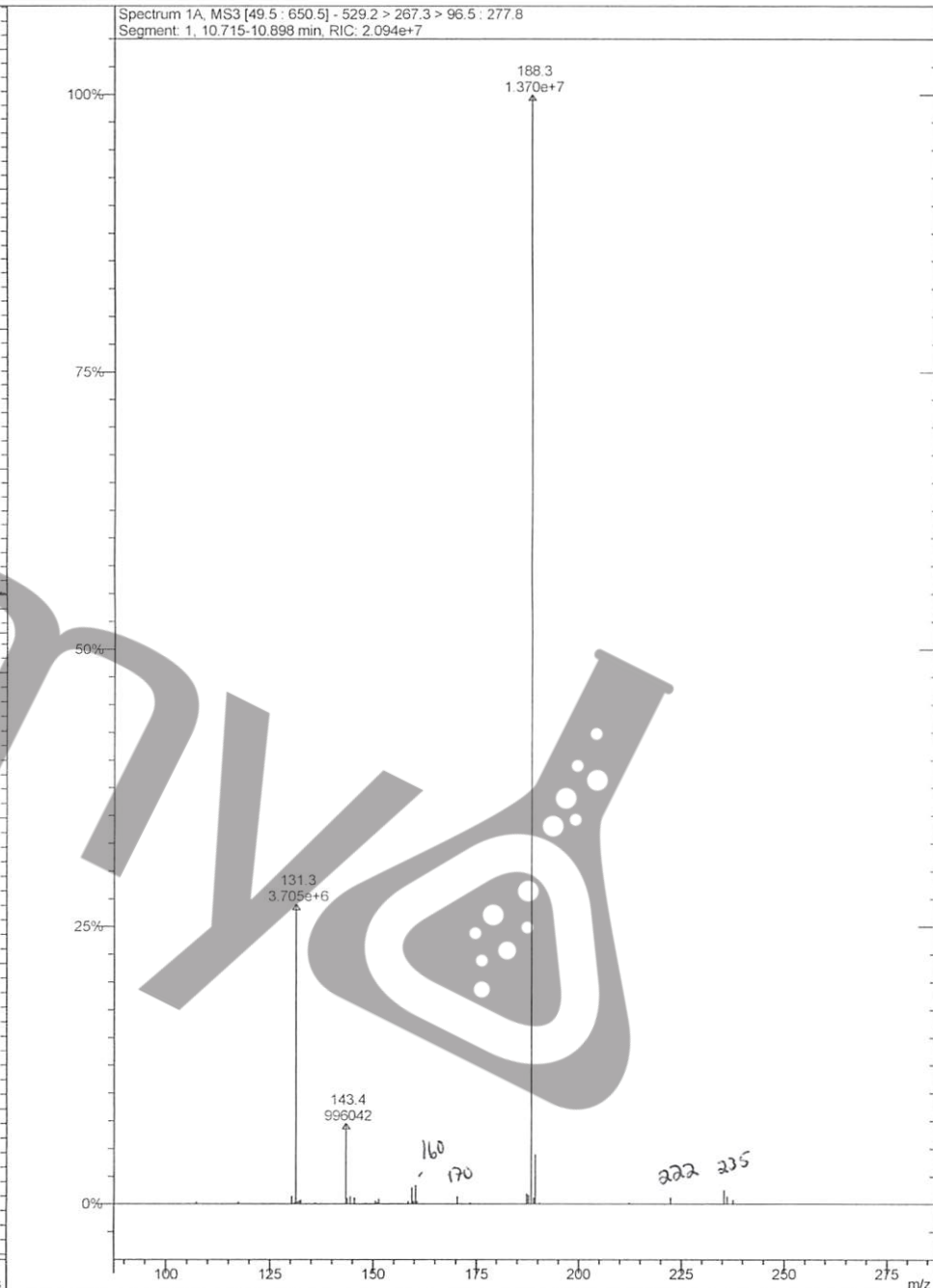
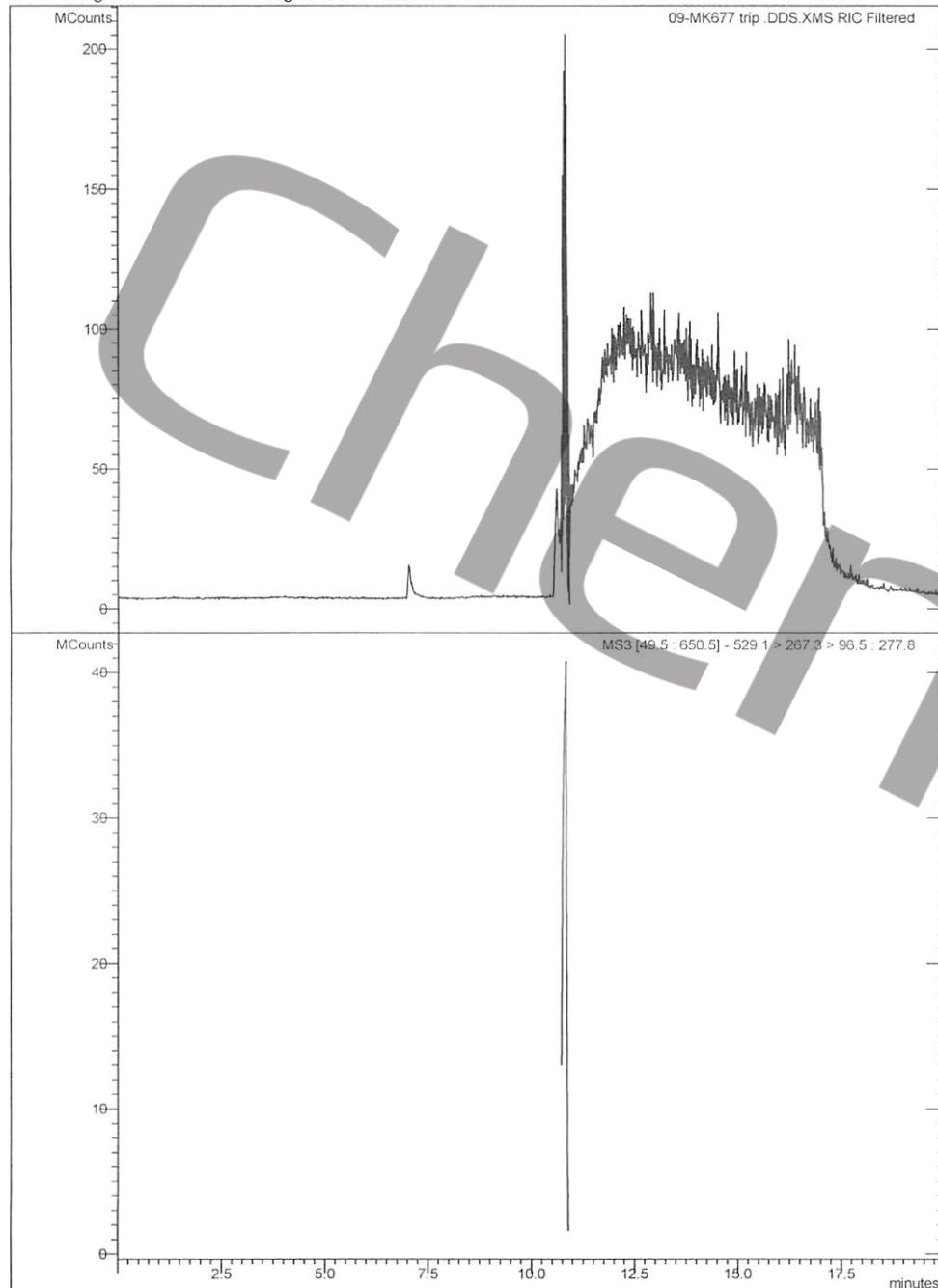
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Sample: 09-MK677 trip

Scan Range: 1 - 1540 Time Range: 0.00 - 19.99 min.

Operator: DRC

Date: 4/13/2017 9:09 AM





# 21563

## S&N Labs

2021 E. Fourth Street, Suite 112  
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Tel: 714-543-2211

**Sample:** MK677  
**Date:** 04/14/2017  
**Analyst:** Chris French

**Client:**  
Chemyo LLC

