

## 1. SYNONYMS

### Other Names:

Salvia divinorum,  
Ska pastoa,  
Shepherdess's Herb  
Sally-D

## 2. CHEMICAL AND PHYSICAL DATA

### 2.1. CHEMICAL DATA

Form	Chemical Formula	Molecular Weight	Melting Point (°C)
Salvinorin A	C <sub>23</sub> H <sub>28</sub> O <sub>8</sub>	432.5	***

### 2.2. SOLUBILITY

Form	A	C	E	H	M	W
Salvinorin A	S	S	S	S	S	SS

A = acetone, C = chloroform, E = ether, H = hexane, M = methanol and W = water, VS = very soluble, FS = freely soluble, S = soluble, PS = sparingly soluble, SS = slightly soluble, VSS = very slightly soluble and I = insoluble

### **3. SCREENING TECHNIQUES**

N/A

### **4. SEPARATION TECHNIQUES**

Salvinorin A can be extracted from the *Salvia divinorum* leaf matrix by solvent extraction. Recrystallization will result in a very clean product and large crystals.

### **5. QUANTITATIVE DATA**

N/A

### **6. QUALITATIVE DATA**

See spectra on the following pages for [Mass Spectrometry](#), [FT-IR](#), [FT-Raman](#), and [Nuclear Magnetic Resonance](#).

### **7. REFERENCES**

Bingham, Andrea K. et al, Divinatorins A-C, New Neoclerodane Diterpenoids from the Controlled Sage *Salvia divinorum*, *Journal Natural Products*, 66(9), 1242-1244, 2003.

Gruber, John W. et al, High Performance Liquid Chromatographic Quantitation of Salvinorin from Tissues of *Salvia divinorum* epling and jativa-m, *Phytochemical Analysis*, 10(1), 22-25, 1999.

Munro, Thomas A. and Rizzacasa, Mark A., Salvinorins D-F, New Neoclerodane Diterpoids from *Salvia divinorum*, and an Improved Method for the Extraction of Salvinorin A, *Journal Natural Products*, 66(5),703-705, 2003.

Shultes, Richard A. and Hoffman, Albert, *The Botany and Chemistry of Hallucinogens*, Charles C. Thomas, 1980.

Valdes, Leander J. et al, Divinorin A, a Psychotropic Terpenoid, and Dinvinorin B from the Hallucinogenic Mexican Mint *Salvia divinorum*, *Journal of Organic Chemistry*, 1954(49), 4716-4720, 1984.

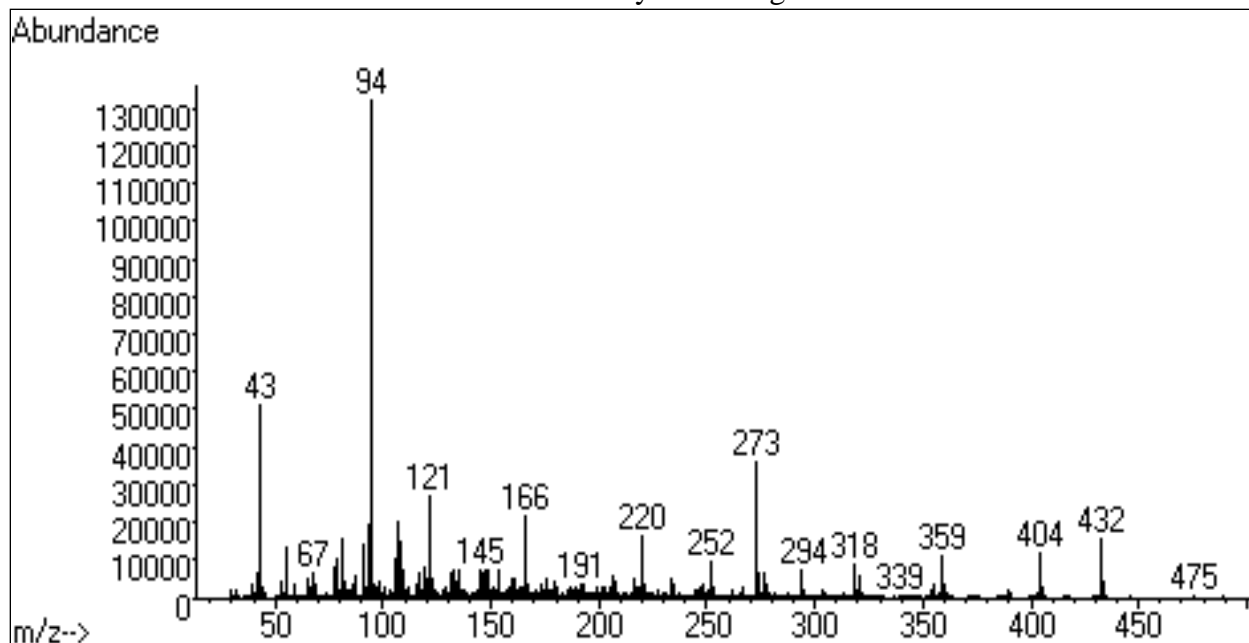
### **8. ADDITIONAL RESOURCES**

[Forendex](#)

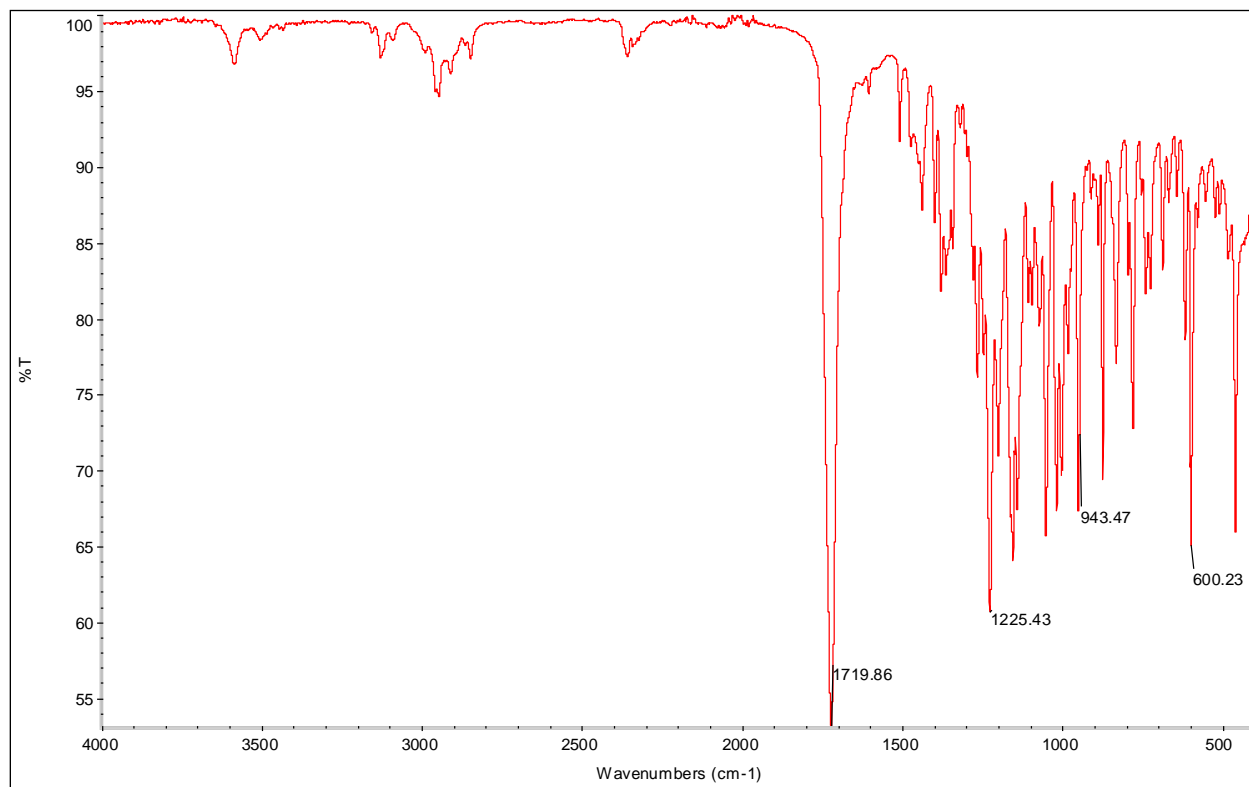
[Wikipedia](#)

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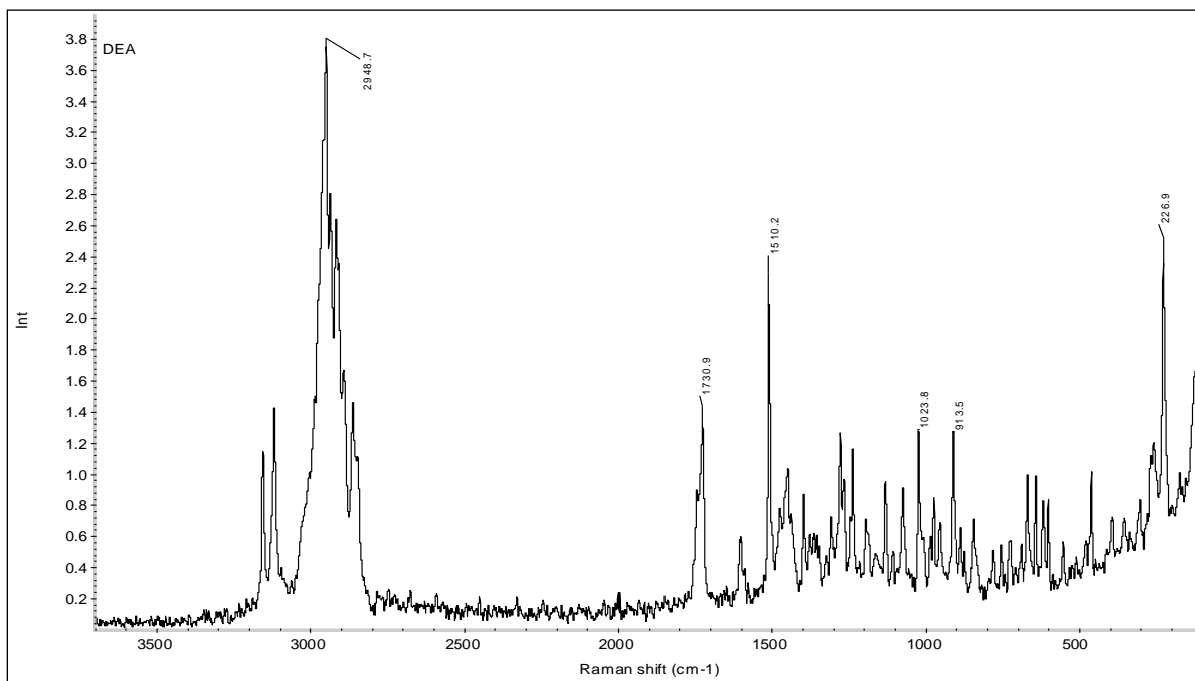
MS: Salvinorin A  
University of Michigan Standard



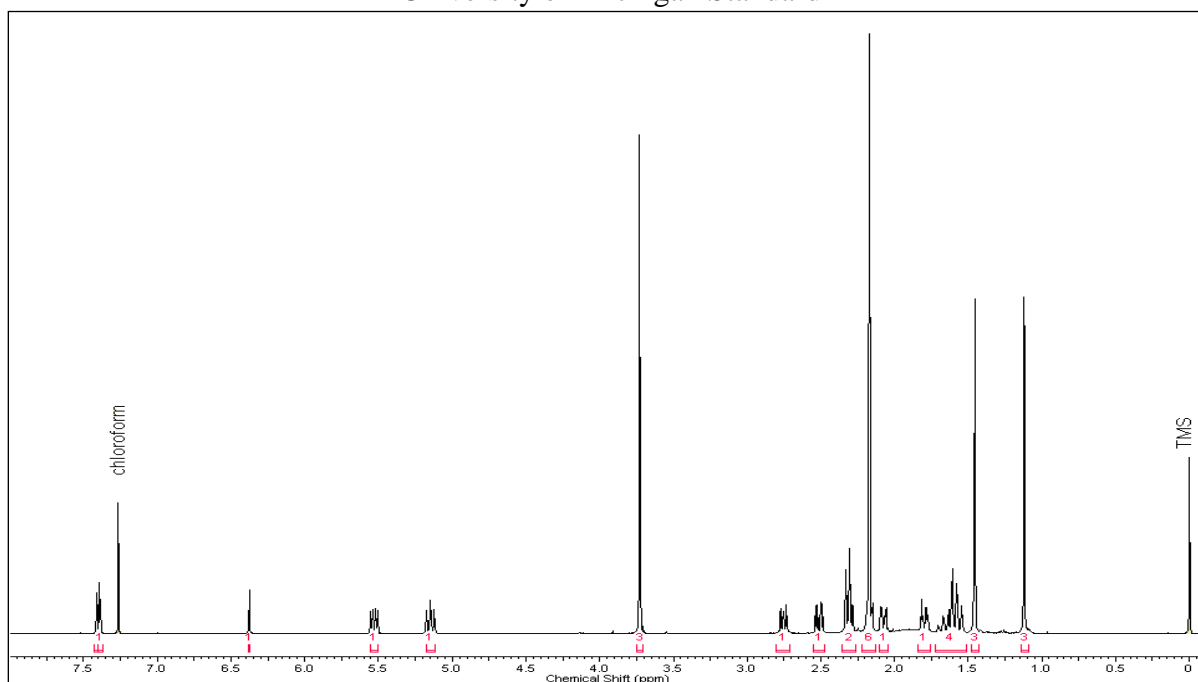
FTIR (one bounce ATR): Salvinorin A  
University of Michigan Standard  
4 cm<sup>-1</sup> resolution 32 scans



FT RAMAN: Salvignorin A  
University of Michigan Standard  
4 cm<sup>-1</sup> resolution 32 scans

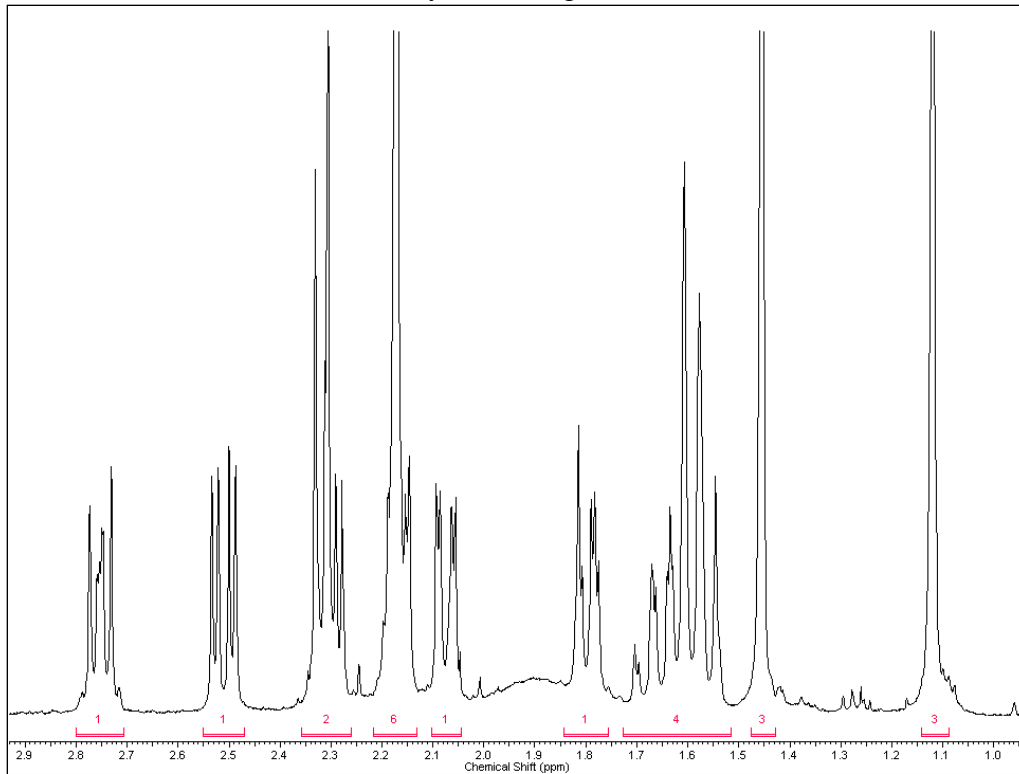


NMR (PROTON) Salvignorin A in chloroform-d, 400 MHz  
University of Michigan Standard

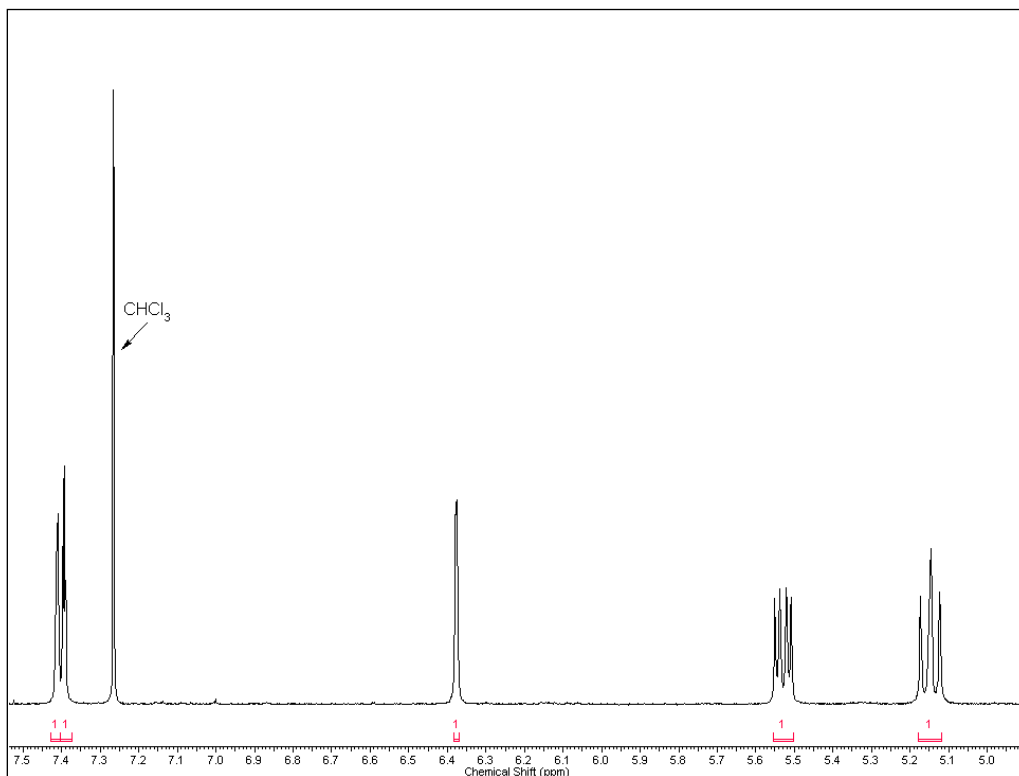


ppm 7.28 - 7.41 (m, 3 H) 7.22 (d, J=6.85 Hz, 2 H) 5.03 (t, J=5.38 Hz, 1 H) 4.16 (dd, J=10.96, 9.00 Hz, 1 H) 3.81 (dd, J=11.15, 5.09 Hz, 1 H) 3.75 (dd, J=9.00, 5.28 Hz, 1 H) 3.38 (d, J=2.93 Hz, 1 H) 3.06 - 3.15 (m, 1 H) 2.93 - 3.00 (m, 1 H) 2.67 (d, J=2.93 Hz, 1 H) 2.45 (s, 3 H) 2.11 (dt, J=15.26, 4.79 Hz, 1 H) 2.02 (dt, J=15.26, 4.70 Hz, 1 H) 1.58 (d, J=15.06 Hz, 1 H) 1.33 (d, J=15.26 Hz, 1 H)

NMR (PROTON) Salvignorin A in chloroform-d, 400 MHz  
University of Michigan Standard



NMR (PROTON) Salvignorin A in chloroform-d, 400 MHz  
University of Michigan Standard



NMR (CARBON): Salvinator A  
University of Michigan Standard

