

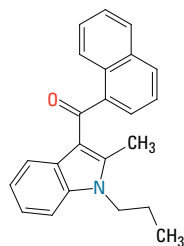
## Determination of Synthetic Cannabinoids in Incense Products and Herbal Blends

FORENSICS & TOXICOLOGY

STEP 7 ORAL  
WARNING!!  
Seal  
DO NOT REMOVE  
EVIDENCE  
ACTION KIT



**Do you need to confidently identify the presence of synthetic cannabinoids in herbal blends?**



JW-015

The rapid proliferation of synthetic cannabinoid analogs and homologs in combination with the growth in popularity of synthetic cannabinoid use among teens and young adults is of serious concern. The structural similarity and isomeric forms of these cannabinoids in conjunction with the botanical substrate and the lack of reference materials for use in positive identifications present obstacles to analysis. Forensic laboratories are challenged to find trace-level cannabinoids in complex chromatographic data and identify the subtle differences between cannabinoid species that yield very similar retention times and mass spectra.

To help laboratories overcome these obstacles, Agilent Technologies, in collaboration with the Criminalistics Division of NMS Labs, has developed and validated an analytical method including a sample preparation and extraction protocol, as well as a supporting compendium and searchable mass spectral library of over 35 synthetic cannabinoids and their derivatives. The resulting method and library provides an effective and easy-to-replicate approach to the identification of synthetic cannabinoids in herbal incense blends by GC/MS. The compendium, library and all supporting electronic method files needed to perform the analysis are available from Agilent free-of-charge, at [www.agilent.com/chem/cannabinoidcd](http://www.agilent.com/chem/cannabinoidcd).

### Compounds

- JWH-015, JWH-018, JWH-019, JWH-073, JWH-081, JWH-122, JWH-133, JWH-200, JWH-203, JWH-210, JWH-250, JWH-251, JWH-398
- HU-210, HU-211, HU-308, HU-331
- CB-25, CB-52
- CP47,497 (C7 analog), CP47,497 (C8 analog)
- CP55,940
- AM-694, AM-2201
- RCS-4, RCS-8
- WIN55,212-2, WIN55-212-3



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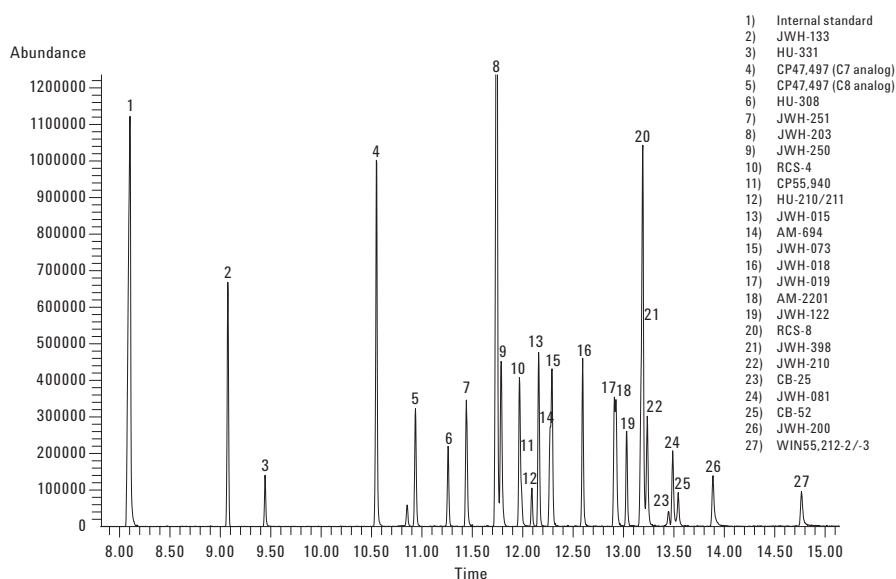


Figure 1. GC/MS Total Ion Chromatogram of the Synthetic Cannabinoids Incorporated in the Method.

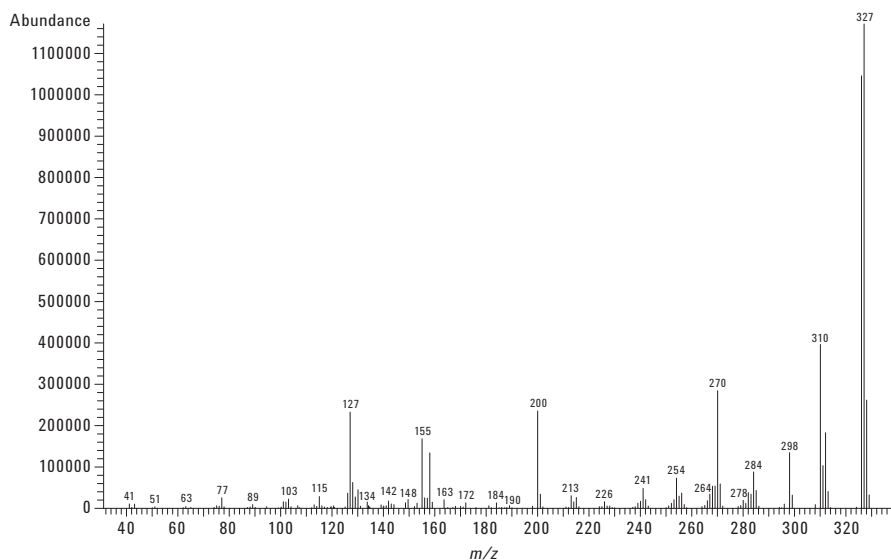


Figure 2. Mass Spectrum of JWH-015.

## Key Benefits

Developed in collaboration with the Criminalistics Division of NMS Labs, an ASCLD accredited laboratory, a cd-rom is available, which contains:

- Validated analytical method, including sample preparation
- GC/MS library of synthetic cannabinoids
- Deconvolution Reporting Software (DRS) library is available to facilitate data interpretation
- Electronic method and library files for rapid start-up
- Compendium of synthetic cannabinoids with mass spectra

Learn more:

The compendium and mass spectral library can be requested at [www.agilent.com/chem/cannabinoidcd](http://www.agilent.com/chem/cannabinoidcd)

Email: [info\\_agilent@agilent.com](mailto:info_agilent@agilent.com)

Find a customer center in your country: [www.agilent.com/chem/contactus](http://www.agilent.com/chem/contactus)

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