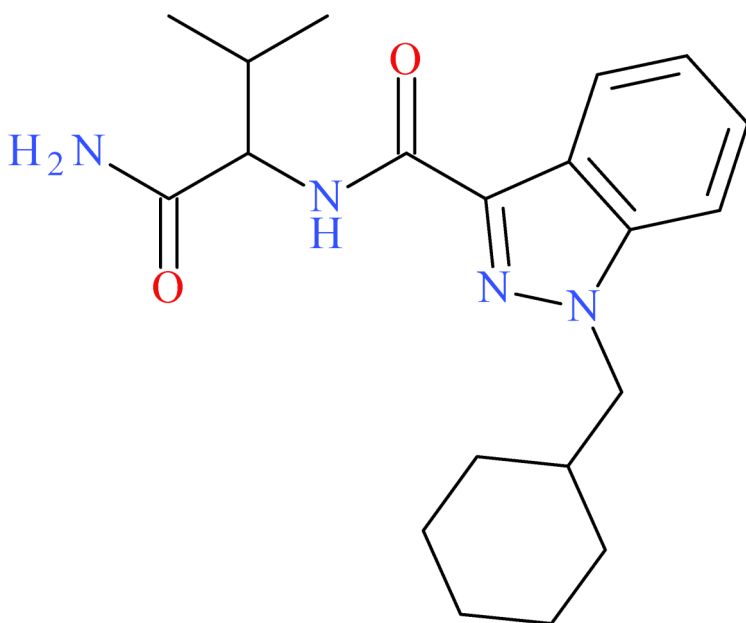




AB-CHMINACA



| NPS SUBCLASS | Synthetic Cannabinoid |
|-----------------|-----------------------|
| REPORT DATE | August 19, 2024 |
| SAMPLE RECEIVED | April 4, 2024 |
| SAMPLE TYPE | Drug Material |

| | |
|---------------------------------|--|
| Preferred Name | AB-CHMINACA |
| Synonyms | N/A |
| Formal Name | N-(1-carbamoyl-2-methyl-propyl)-1-(cyclohexylmethyl)indazole-3-carboxamide |
| InChI Key | KJNZIEGLNLCWTQ-UHFFFAOYSA-N |
| CAS Number | 1185887-21-1 |
| Chemical Formula | C ₂₀ H ₂₈ N ₄ O ₂ |
| Molecular Weight | 356.5 |
| Molecular Ion [M ⁺] | 356 |
| Exact Mass [M+H] ⁺ | 357.2285 |

Characterization & Intelligence

The following information was compiled in August 2024 and is subject to change as new research is conducted and as new information becomes available:

Description: AB-CHMINACA is a novel synthetic cannabinoid with structural similarity to MMB-CHMINACA, ADB-CHMINACA, and other synthetic cannabinoids. AB-CHMINACA was first identified and reported to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) in 2014 and was continuously reported until 2017.¹ AB-CHMINACA has reemerged and was detected in April 2024 by our laboratory with confirmation via standard reference material.

Sample Source: Georgia Poison Center, Emory University, & Fulton County Jail (Atlanta, GA)

Sample Appearance: Paper samples & toxicology samples

Pharmacology: AB-CHMINACA is an active and potent CB₁ receptor agonist (EC₅₀ = 7.4 nM).²

Toxicology: AB-CHMINACA has been identified in sixteen toxicology cases to date at the CFSRE.

Drug Materials: AB-CHMINACA has been detected in five drug materials to date at the CFSRE.

Demographics / Geographics: Toxicology cases and drug materials both originated from Georgia. AB-CHMINACA was found alongside other synthetic cannabinoids (e.g., MDMB-4en-PINACA).

Legal Status: AB-CHMINACA is a Schedule I drug in the United States (21 CFR 1308).

References:

- ▶ Cayman Chemical: [AB-CHMINACA](#)
- ▶ National Forensic Laboratory (Slovenia): [AB-CHMINACA](#)
- ▶ ¹EMCDDA (2017) [AB-CHMINACA: EMCDDA-Europol Joint Report on a New Psychoactive Substance](#)
- ▶ ²Wiley *et al.* (2015) [AB-CHMINACA, AB-PINACA, and FUBIMINA: Affinity and potency of novel synthetic cannabinoids in producing delta-9-tetrahydrocannabinol-like effects in mice](#)

About: In collaboration with medical examiner and coroner offices, crime laboratories, clinical partners, and other stakeholders, the Center for Forensic Science Research and Education (CFSRE) is documenting first confirmations of NPS through analysis of drug materials and/or toxicology samples. These reports are generated using comprehensive analytical techniques (e.g., GC-MS, LC-QTOF-MS, NMR) and include available information about the new substances identified at the time of reporting, as well as the analytical data generated during testing. Our new drug monographs are intended to assist with the rapid identification of NPS in forensic casework and related disciplines, and should not be used for confirmatory purposes alone.

Analytical Notes: All identifications were made based on evaluation of analytical data (GC-MS and LC-QTOF-MS) in comparison to analysis of acquired reference material.

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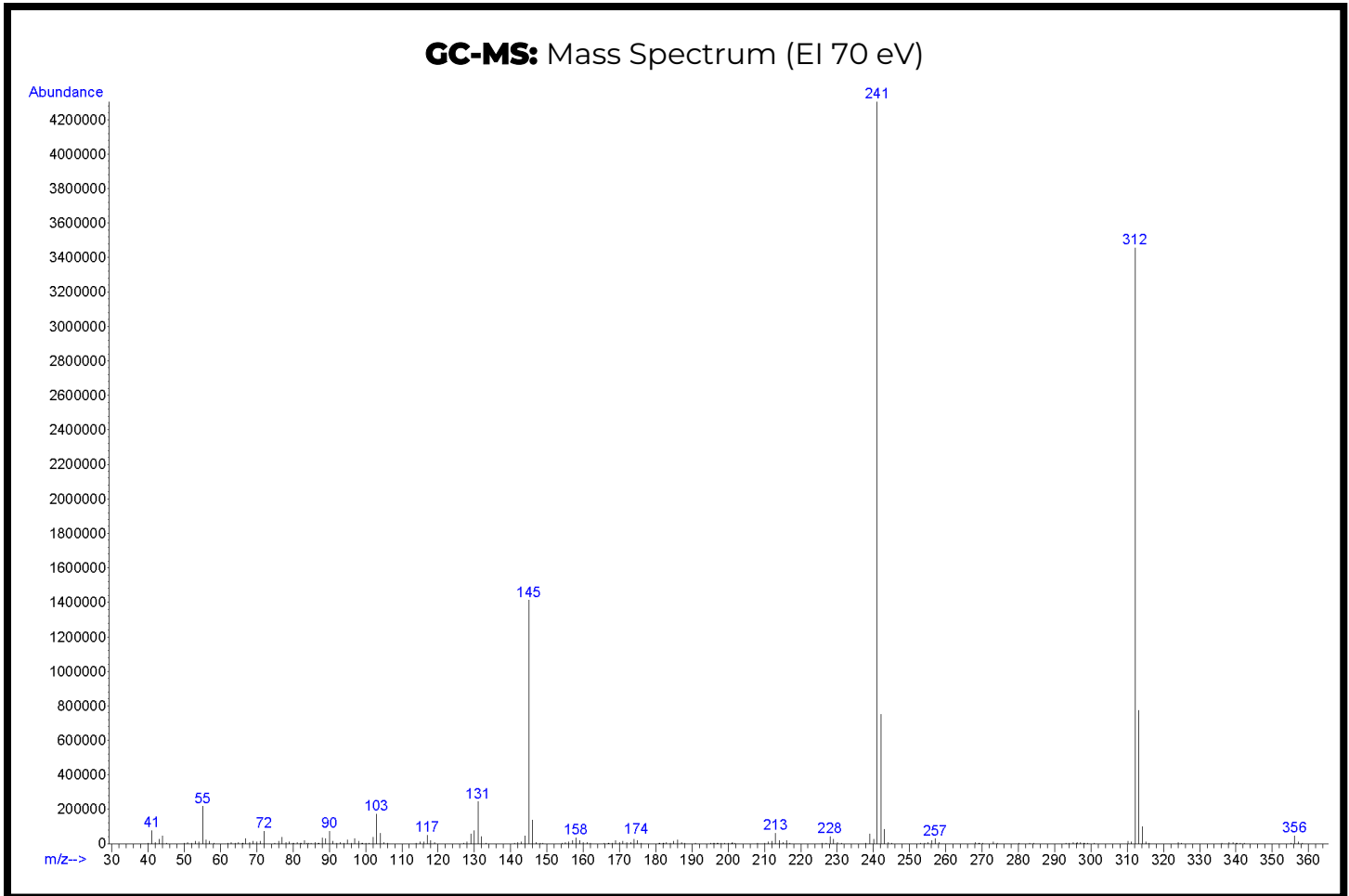
Gas Chromatography Mass Spectrometry (GC-MS)

Laboratory: Center for Forensic Science Research and Education (CFSRE, Willow Grove, PA, USA)

Instrument: Agilent 5975 Series GC/MSD

Methods: [GC-MS Method Details](#) & [Monographs](#)

Sample Preparation: Dilution in methanol



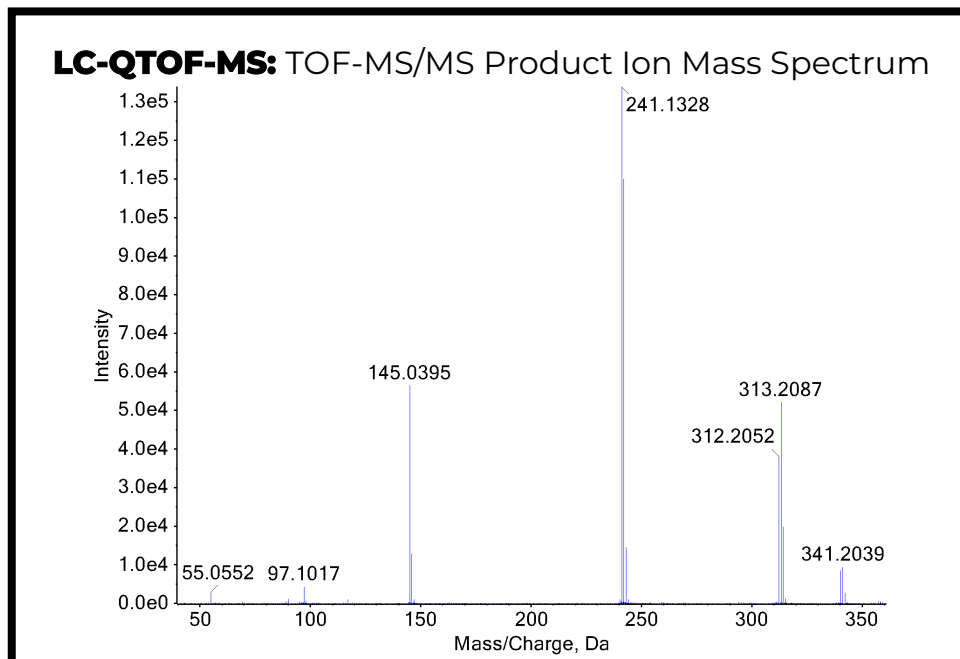
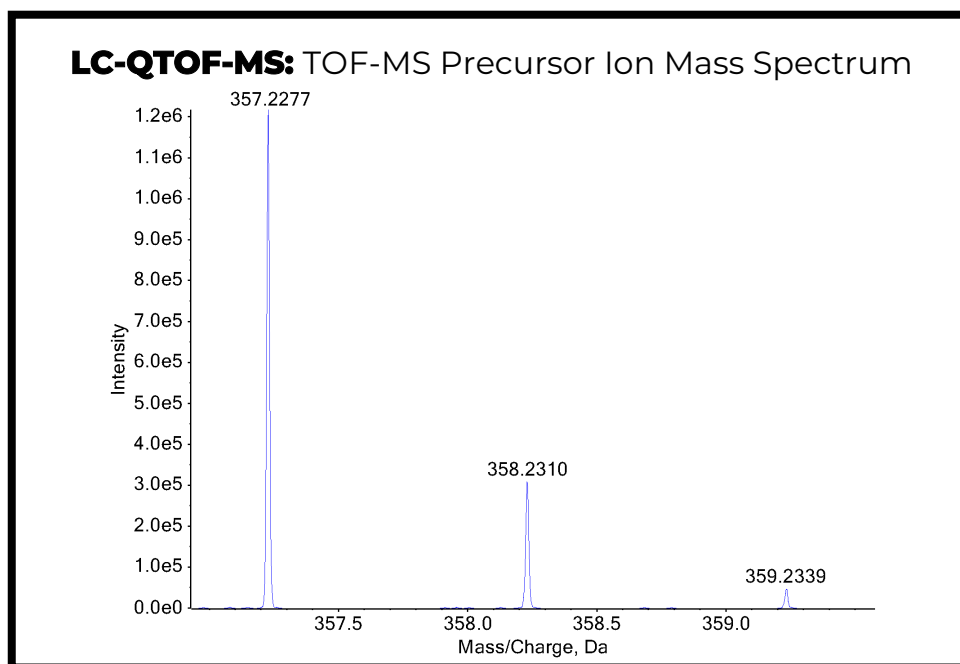
Liquid Chromatography Quadrupole Time-of-Flight Mass Spectrometry (LC-QTOF-MS)

Laboratory: Center for Forensic Science Research and Education (CFSRE, Willow Grove, PA, USA)

Instrument: Sciex 5600+ LC-QTOF-MS

Methods: [LC-QTOF-MS Method Details](#) & [Monographs](#)

Sample Preparation: Dilution in mobile phase



Confirmation Using Drug Standard: Reference material (Batch: 0690008) was purchased from Cayman Chemical (Ann Arbor, MI, USA). The analyte was confirmed to be AB-CHMINACA based on retention time (sample: 9.23 min vs. standard: 9.39 min) and mass spectral data comparisons.