





CUMYL-TsINACA

Sample Type: Toxicology Sample

N N N N O=S

Latest Revision: **December 13, 2022**Date Received: **October 27, 2022**

Date of Report: December 13, 2022

1. GENERAL INFORMATION

IUPAC Name: N-(1-methyl-1-phenyl-ethyl)-1-(p-tolylsulfonyl)indazole-3-

carboxamide

InChI String: InChI=1S/C24H23N3O3S/c1-17-13-15-19(16-14-17)31(29,30)27-

21-12-8-7-11-20(21)22(26-27)23(28)25-24(2,3)18-9-5-4-6-10-

18/h4-16H,1-3H3,(H,25,28)

CFR: Not Scheduled (12/2022)

CAS# Not Available

Synonyms: Cumyl-tosyl-indazole-3-carboxamide

Source: ACMT's Toxicology Investigators Consortium (ToxIC)

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

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2. CHEMICAL AND PHYSICAL DATA

2.1 CHEMICAL DATA

Drug	Chemical	Molecular	Molecular Ion	Exact Mass
	Formula	Weight	[M ⁺]	[M+H] ⁺
CUMYL-TsINACA	$C_{24}H_{23}N_3O_3S$	433.5	433	434.1533

3. SAMPLE HISTORY

To date, CUMYL-TsINACA was identified in one clinical case since October 2022. The geographical and demographical breakdown is below:

Geographical Location: Los Angeles (n=1)

Biological Sample: Plasma (n=1)

Date of First Receipt: October 2022

Other Notable Findings: MDMB-INACA, BZO-CHMOXIZID, 4F-MDMB-BINACA

4. BRIEF DESCRIPTION

CUMYL-TsINACA is classified as a synthetic cannabinoid. Synthetic cannabinoids have been reported to cause psychoactive effects similar to delta-9-tetrahydrocannabinol (THC). Synthetic cannabinoids have caused adverse events, including deaths, as described in the literature. Little to no information is currently available regarding CUMYL-TsINACA. CUMYL-TsINACA is not explicitly scheduled in the United States.

5. ADDITIONAL RESOURCES

https://www.policija.si/apps/nfl_response_web/0_Analytical_Reports_final/CUMYL-TsINACA-ID-3193-22_report.pdf

https://www.caymanchem.com/product/36834/cumyl-tsinaca

6. QUALITATIVE DATA

6.1 GAS CHROMATOGRAPHY MASS SPECTROMETRY (GC-MS)

Testing Performed At: The Center for Forensic Science Research and Education at the

Fredric Rieders Family Foundation (Willow Grove, PA)

Sample Preparation: Standard diluted in methanol

Instrument: Agilent 5975 Series GC/MSD System

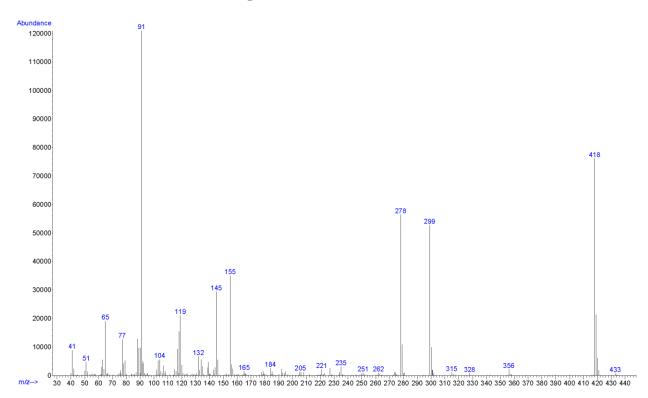
Standard: Reference material for CUMYL-TsINACA (Batch: 0647276-2)

was purchased from Cayman Chemical Company (Ann Arbor, MI,

USA). (https://www.caymanchem.com/product/36834/cumyl-

tsinaca)

EI (70 eV) Mass Spectrum: CUMYL-TsINACA (Standard)



6.2 LIQUID CHROMATOGRAPHY QUADRUPOLE TIME-OF-FLIGHT MASS SPECTROMETRY (LC-QTOF-MS)

Testing Performed At: The Center for Forensic Science Research and Education at the

Fredric Rieders Family Foundation (Willow Grove, PA)

Sample Preparation: Liquid-liquid extraction (LLE)

Instrument: Sciex X500R, Sciex ExionLC

Column: Phenomenex® Kinetex C18 (50 mm x 3.0 mm, 2.6 μm)

Mobile Phase: A: Ammonium formate (10 mM, pH 3.0)

B: Methanol/acetonitrile (50:50)

Flow rate: 0.4 mL/min

Gradient: Initial: 95A:5B; 5A:95B over 13 min; 95A:5B at 15.5 min

Temperatures: Autosampler: 15 °C

Column Oven: 30 °C

Source Heater: 600 °C

Injection Parameters: Injection Volume: 10 μL

QTOF Parameters: TOF MS Scan Range: 100-510 Da

Precursor Isolation: SWATH® acquisition (27 windows)

Fragmentation: Collison Energy Spread (35±15 eV)

MS/MS Scan Range: 50-510 Da

Retention Time: 10.01 min

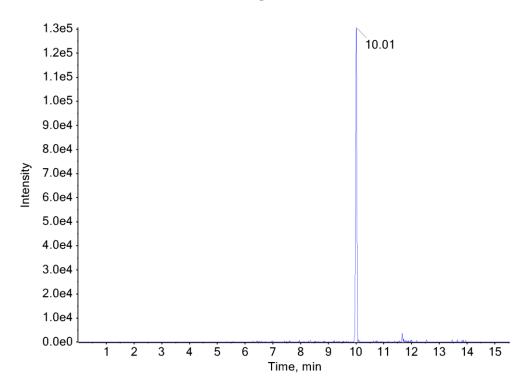
Standard Comparison: Reference material for CUMYL-TsINACA (Batch: 0647276-2)

was purchased from Cayman Chemical Company (Ann Arbor, MI, USA). Analysis of this standard resulted in positive identification of the analyte in the extract as CUMYL-TsINACA, based on

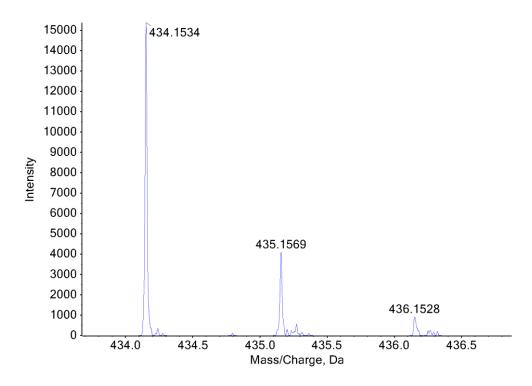
retention time (10.08 min) and mass spectral data.

(https://www.caymanchem.com/product/36834/cumyl-tsinaca)

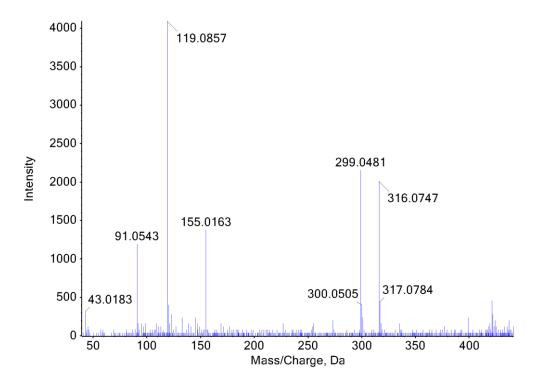
Extracted Ion Chromatogram: CUMYL-TsINACA



TOF MS Spectra: CUMYL-TsINACA



MS/MS Spectra: CUMYL-TsINACA



7. FUNDING

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