ANALYTICAL REPORT

5F-APICA (C24H31FN2O)

N-(Adamantan-1-yl)-1-(5-fluoropentyl)-1H-indole-3-carboxamide

Remark – other active cpd. detected: none

Sample ID: 1225-15
Sample description: powder - white
Sample type: RM-reference material
Comments¹: Chiron AS Lot#13651; RESPONSE -purchasing
Date of entry: 8/31/2015

Substance identified-structure² (base form)

Systematic name: N-(Adamantan-1-yl)-1-(5-fluoropentyl)-1H-indole-3-carboxamide

Other names:

Formula (per base form) C24H31FN2O
Mₚ (g/mol) 382.51
Salt form: base
StdInChIKey COYHGCHRXECF-UHFFFAOYSA-N
Compound Class Cannabinoids
Other active cpd. detected none
Add.info (purity..) 99.20%

¹ This report has been produced with the financial support of the Prevention of and Fight against Crime Programme of the European Union (grant agreement number JUST/2013/ISEC/DRUGS/AG/6413). The contents of this report are the sole responsibility of the National Forensic Laboratory and can in no way be taken to reflect the views of the European Commission.
² Created by OPSIN free tool: http://opsin.ch.cam.ac.uk/ DOI: 10.1021/ci100384d
Report updates

<table>
<thead>
<tr>
<th>date</th>
<th>comments (explanation)</th>
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Supporting information

<table>
<thead>
<tr>
<th>Analytical technique</th>
<th>applied</th>
<th>remarks</th>
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<tbody>
<tr>
<td>GC-MS (EI ionization)</td>
<td>+</td>
<td>NFL GC-RT (min): 17.46 BP(1): 232; BP(2): 382, BP(3): 144,</td>
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<td>FTIR-ATR</td>
<td>+</td>
<td>direct measurement</td>
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<tr>
<td>GC-IR (condensed phase)</td>
<td>+</td>
<td>spectrum is always for the base form of compound</td>
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**GC-MS** (Agilent):
GC-method is RT locked to tetracosane (RT=9.53 min).
Injection volume 1 ml and split mode (1:50).
Injector temperature: 280 °C.
Chromatographic separation
Column: HP1-MS (100% dimethylpolysiloxane), length 30 m, internal diameter 0.25 mm, film thickness 0.25 mm.
Carrier gas He: flow-rate 1.2 ml/min. GC oven program: 170 °C for 1 min, followed by heating up to 293 °C at a rate of 18 °C/min, hold for 6.1 min, than heating at 50 °C/min up to 325 °C and finally 2.8 min isothermal.
MSD source EI = 70 eV. GC-MS transfer line T = 235°C, source and quadrupole temperatures 280°C and 180°C, respectively. Scan range m/z scan range: from 50 (40) to 550 amu.

**FTIR-ATR** (Perkin Elmer): scan range 4000-400 cm⁻¹; resolution 4cm⁻¹

**GC- (MS)-IR** condensed phase (GC-MS (Agilent) & IR (Spectra analyses-Danny) IR scan range 4000 to 700, resolution 4cm⁻¹
GC-method:
Injection volume 1 ml and split mode (1:5).
Injector temperature: 280 °C.
Chromatographic separation
Column: HP1-MS (100% dimethylpolysiloxane), length 30 m, internal diameter 0.25 mm, film thickness 0.25 mm.
Carrier gas He: flow-rate 1.2 ml/min. GC oven program: 170 °C for 1 min, followed by heating up to 293 °C at a rate of 18 °C/min, hold for 6.1 min, than heating at 50 °C/min up to 325 °C and finally 2.8 min isothermal.
Split MS : IR : (1:9)
MSD source EI = 70 eV. GC-MS transfer line T= 235°C, source and quadrupole temperatures 280°C and 180°C, respectively. Scan range m/z scan range: from 50 (40) to 550 amu.
IR (condensed phase): IR scan range 4000 to 700, resolution 4cm⁻¹
FIGURES OF SPECTRA

MS (EI)

Abundance

Scan 1411 (17.458 min) from PICA_ID1225-15.D/data.ms

m/z ->

51.0, 79.0, 116.0, 144.0, 173.0, 204.1, 232.0, 264.1, 307.1, 335.1, 382.1, 428.9
FTIR-ATR

IR-condensed phase

Sample: 5F-APICA, 1225-15

NOTE: This is condensed phase IR (per base form of substance) Instrument (Discover-6C)