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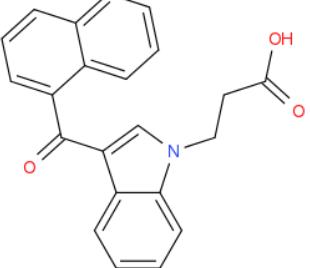
ANALYTICAL REPORT

JWH-072-N-carboxy (C₂₂H₁₇NO₃)

3-[3-(naphthalen-1-ylmethyl)-1H-indol-1-yl]propanoic acid

Remark – other active cpd. detected: **none**

| | |
|-------------------------|---|
| Sample ID: | 1288-15 |
| Sample description: | crystallinic - white |
| Sample type: | RM-reference material |
| Comments ¹ : | Chiron Lot#15805; for GC-MS compound was derivatized by MSTFA: GC-RT and MS spectrum refers for TMS derivative;Chiron |
| Date of entry: | 8/22/2015 |

| | |
|---|--|
| Substance identified-structure ² (base form) |  |
| Systematic name: | 3-[3-(naphthalene-1-carbonyl)-1H-indol-1-yl]propanoic acid |
| Other names: | |
| Formula (per base form) | C ₂₂ H ₁₇ NO ₃ |
| M _w (g/mol) | 343.38 |
| Salt form: | base |
| StdInChiKey | VCRZMЕAJRGIGCT-UHFFFAOYSA-N |
| Compound Class | Cannabinoids |
| Other active cpd. detected | none |
| Add.info (purity..) | 99.40% |

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

| date | comments (explanation) |
|------|------------------------|
| | |
| | |
| | |
| | |

Supporting information

| Analytical technique: | applied | remarks |
|-------------------------|---------|---|
| GC-MS (EI ionization) | + | NFL GC-RT (min): 16.45 BP(1): 270; BP(2): 415, BP(3) :127, Sample was derivatized by MSTFA |
| FTIR-ATR | + | direct measurement |
| GC-IR (condensed phase) | | |

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 thickens 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 quadropole 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 thickens 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 quadropole temperatures 280 °C and 180 °C, respectively. Scan range m/z scan range: from 50 (40) to 550 amu.

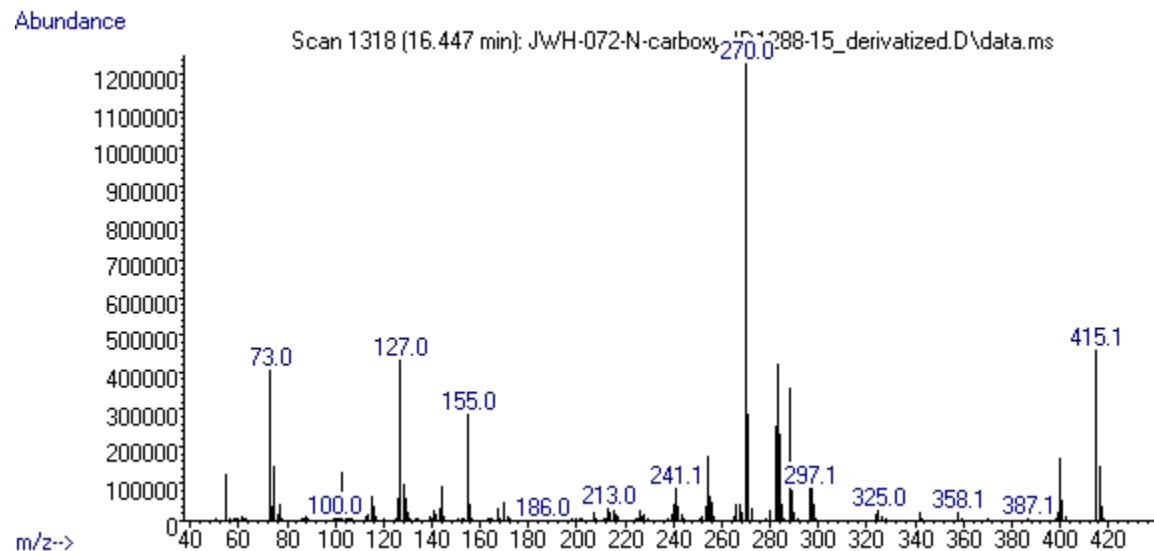
IR (condensed phase): IR scan range 4000 to 700, resolution 4cm-1

FIGURES OF SPECTRA

Remark:

Non derivatized sample decomposed to 3-(naphthalene-1-carbonyl)-1H-indol.

GC- MS (EI) of TMS derivative



FTIR-ATR

