

# Certificate of analysis



## JWH 073 N-butanoic acid metabolite 4-(3-(1-naphthoyl)-1H-indol-1-yl)-butanoic acid

Item number ....:9000866  
Batch number :0454210  
Purity Specification.....: 98%

Molecular Formula: C<sub>23</sub>H<sub>19</sub>NO<sub>3</sub>  
CAS Number .....: 1307803-52-6

Formula Weight: 357.40  
Expiry date .....: 12/16/2015

| Tests         | Specifications   | Results   |
|---------------|--|---|
| HPLC          | Column .....: C18, 5 $\mu$ , 4.6 X 250 mm<br>Mob. Phase.....: Acetonitrile:Water:Acetic acid (60:40:0.1)<br>Flow Rate.....: 1.00 ml/min<br>Detector UV .....: 210 nm | Retention Time Actual.: 5.70 min<br>Purity .....: 100.0 % |
| IR            | Conforms with standard   | Conforms  |
| Mass          | Source Type .....: ESI<br>M+Na<br>MH+  | Expected<br>380.3<br>358.1<br>Actual<br>380.3<br>358.4    |
| Melting Point | 61 - 86 °C   | 83 - 85 °C  |
| TLC           | Mob. Phase.....: Dichloromethane:Methanol (95:5)<br>Stationary Phase: Silica Gel<br>Visualized With ..: Sulfuric Acid  | Rf.....: 0.21<br>Purity % .....: 100.00                   |
| UV            | max .....: 218, 246, 315 nm  | max .....: 219, 246, 315 nm                               |

Analyzed by: Ashley Macey

Approved by: Libby Perry