

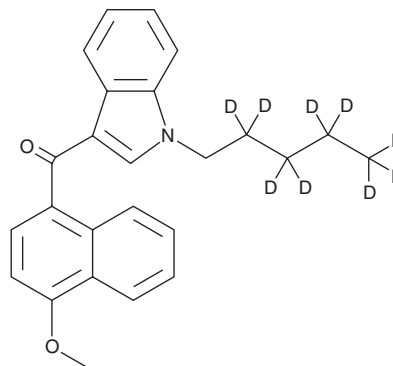
# PRODUCT INFORMATION



## JWH 081-d<sub>9</sub> (exempt preparation)

Item No. 22866

**CAS Registry No.:** 1651833-49-6  
**Formal Name:** (4-methoxy-1-naphthalenyl)  
(1-pentyl-1H-indol-3-yl)-methanone-  
2,2',3,3',4,4',5,5,5-d<sub>9</sub>  
**MF:** C<sub>25</sub>H<sub>16</sub>D<sub>9</sub>NO<sub>2</sub>  
**FW:** 380.5  
**Chemical Purity:** ≥98% (JWH 081)  
**Deuterium**  
**Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>9</sub>); ≤1% d<sub>0</sub>  
**UV/Vis.:** λ<sub>max</sub>: 212, 316 nm  
**Supplied as:** A 1 mg/ml solution in methanol  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Description

JWH 081-d<sub>9</sub> (exempt preparation) (Item No. 22866) is intended for use as an internal standard for the quantification of JWH 081 (Item Nos. 10579 | 15665) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

JWH 081 is categorized as a synthetic cannabinoid.<sup>1,2</sup> It has been found in Spice/K2-type herbal blends and may have neurotoxic properties.<sup>3</sup> JWH 081 is regulated as a Schedule I compound in the United States. JWH 081-d<sub>9</sub> (exempt preparation) (Item No. 22866) is provided as a DEA exempt preparation. This product is intended for research and forensic applications.

### References

1. Aung, M.M., Griffin, G., Huffman, J.W., *et al.* Influence of the N-1 alkyl chain length of cannabimimetic indoles upon CB<sub>1</sub> and CB<sub>2</sub> receptor binding. *Drug Alcohol Depend.* **60(2)**, 133-140 (2000).
2. Huffman, J.W., Zengin, G., Wu, M.J., *et al.* Structure-activity relationships for 1-alkyl-3-(1-naphthoyl) indoles at the cannabinoid CB<sub>1</sub> and CB<sub>2</sub> receptors: Steric and electronic effects of naphthoyl substituents. New highly selective CB<sub>2</sub> receptor agonists. *Bioorg. Med. Chem.* **13(1)**, 89-112 (2005).
3. Cha, H.J., Seong, Y.H., Song, M.J., *et al.* Neurotoxicity of synthetic cannabinoids JWH-081 and JWH-210. *Biomol. Ther. (Seoul)* **23(6)**, 597-603 (2015).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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