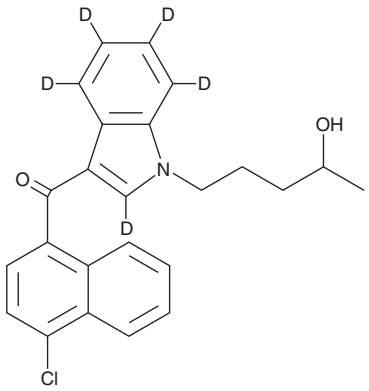
PRODUCT INFORMATION

(±)-JWH 398 N-(4-hydroxypentyl) metabolite-d_5

Item No. 14370

CAS Registry No.:	2747914-17-4
Formal Name:	(4-chloronaphthalen-1-yl)(1-(4-hydroxypentyl)-1H-indol-3-yl-2,4,5,6,7-d_5)methanone
MF:	$C_{24}H_{17}ClD_5NO_2$
FW:	396.9
Chemical Purity:	≥98% (JWH 398 N-(4-hydroxypentyl) metabolite)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_5); ≤1% d_0
UV/Vis.:	λ_{max}: 219, 316 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Description

(±)-JWH 398 N-(4-hydroxypentyl) metabolite-d_5 (Item No. 14370) is intended for use as an internal standard for the quantification of JWH 398 N-(4-hydroxypentyl) metabolite (Item No. 10943) 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 398 (Item No. 13636) is a synthetic cannabinoid (CB) that activates both central CB_1 and peripheral CB_2 receptors (K_i = 2.3 and 2.8 nM, respectively).[1] It has been reported to be an adulterant of herbal products.[2,3] (±)-JWH 398 N-(4-hydroxypentyl) metabolite is an expected phase I metabolite of JWH 398 (Item No. 13636), detectable in serum and urine. While similar hydroxylated phase I metabolites of synthetic CBs retain activity, the physiological properties of this compound have yet to be determined.[4,5] This product is intended for research and forensic applications.

References

1. Huffman, J.W. The cannabinoid receptors Cannabimimetic indoles, pyrroles, and indenes: Structure-activity relationships and receptor interactions. *The cannabinoid receptors.* Reggio, P. H., editor, *Humana Press* (2009).
2. Kikura-Hanajiri, R., Uchiyama, N., and Goda, Y. Survey of current trends in the abuse of psychotropic substances and plants in *Japan. Leg. Med. (Tokyo)* **13(3)**, 109-15 (2011).
3. Dresen, S., Ferreirós, N., Pütz, M., *et al.* Monitoring of herbal mixtures potentially containing synthetic cannabinoids as psychoactive compounds. *J. Mass Spectrom.* **45(10)**, 1186-94 (2010).
4. Brents, L.K., Reichard, E.E., Zimmerman, M., *et al.* Phase I hydroxylated metabolites of the K2 synthetic cannabinoid JWH-018 retain *in vitro* and *in vivo* cannabinoid 1 receptor affinity and activity. *PLoS One* **6(7)**, e21917 (2011).
5. Brents, L.K., Gallus-Zawala, A., Radominska-Pandya, A., *et al.* Monohydroxylated metabolites of the K2 synthetic cannabinoid JWH-073 retainintermediate to high cannabinoid 1 receptor (CB1R) affinity and exhibit neutralantagonist to partial agonist activity. *Biochem. Pharmacol.* **83(7)**, 952-961 (2012).

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