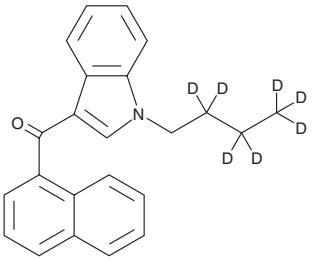
Product Information

JWH 073-d_7 (exempt preparation)

Item No. 9000868

CAS Registry No.: 1415744-43-2
Formal Name: [1-(butyl-2,2,3,3,4,4,4-d_7)-1H-indol-3-yl]-1-naphthalenyl-methanone
MF: $C_{23}H_{14}D_7NO$
FW: 334.5
Chemical Purity: ≥98% JWH 073-d_7 (exempt preparation)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_7); ≤1% d_0
Stability: ≥2 years at -20°C
Supplied as: A solution in methanol
UV/Vis.: λ_{max}: 218, 246, 315 nm



Laboratory Procedures

JWH 073-d_7 (exempt preparation) contains seven deuterium atoms at the 2, 2', 3, 3', 4, 4, and 4 positions. It is intended for use as an internal standard for the quantification of JWH 073 (exempt preparation) by GC- or LC-mass spectrometry (MS). For long term storage, we suggest that JWH 073-d_7 (exempt preparation) be stored as supplied at -20°C. It should be stable for at least two years.

JWH 073-d_7 (exempt preparation) is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of JWH 073-d_7 (exempt preparation) in these solvents is approximately 10 mg/ml.

JWH 073-d_7 (exempt preparation) is used as an internal standard for the quantification of JWH 073 (exempt preparation) by stable isotope dilution 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).

Description

JWH 073 is a mildly selective agonist of the central cannabinoid (CB_1) receptor derived from the aminoalkylindole WIN 55,212-2. The K_i values for binding CB_1 and the peripheral cannabinoid (CB_2) receptor are 8.9 and 38 nM, respectively for a CB_1:CB_2 ratio of 0.23.[1] Its effects on suppression of spontaneous activity, maximum possible antinociceptive effect in the tail-flick assay, and rectal temperature are comparable to those of WIN 55,212-2 when tested in rats.[2]

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_1 and CB_2 receptor binding. *Drug and Alcohol Dependence* **60**, 133-140 (2000).
2. Wiley, J.L., Compton, D.R., Dai, D., *et al.* Structure-activity relationships of indole- and pyrrole-derived cannabinoids. *J. Pharmacol. Exp. Ther.* **285(3)**, 995-1004 (1998).

Cayman Chemical

Mailing address
1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone
(800) 364-9897
(734) 971-3335

Fax
(734) 971-3640

E-Mail
custserv@caymanchem.com

Web
www.caymanchem.com