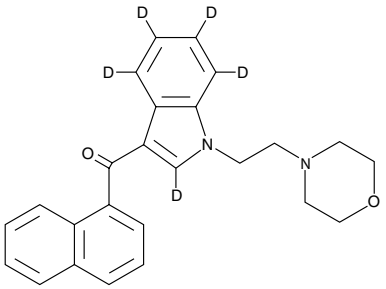
Product Information

JWH 200-d_5 (exempt preparation)

Item No. 10682

CAS Registry No.:	1651833-51-0
Formal Name:	[1-[2-(4-morpholinyl)ethyl]-1H-indol-3-yl-2',4',5',6',7'-d_5]-1-naphthalenyl-methanone
MF:	$C_{25}H_{19}D_5N_2O_2$
FW:	389.5
Chemical Purity:	≥98% JWH 200-d_5 (exempt preparation)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_5); ≤1% d_0
Stability:	≥2 years at -20°C
Supplied as:	A solution in acetonitrile
UV/Vis.:	λ_{max}: 219, 247, 314 nm



Laboratory Procedures

JWH 200-d_5 (exempt preparation) contains five deuterium atoms at the 2', 4', 5', 6', and 7' positions. It is intended for use as an internal standard for the quantification of JWH 200 (exempt preparation) by GC- or LC-mass spectrometry (MS). For long term storage, we suggest that JWH 200-d_5 (exempt preparation) be stored as supplied at -20°C. It should be stable for at least two years.

JWH 200-d_5 (exempt preparation) is supplied as a solution in acetonitrilel. To change the solvent, simply evaporate the acetonitrile under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of JWH 200-d_5 (exempt preparation) in these solvents is approximately 20 mg/ml.

JWH 200-d_5 (exempt preparation) is used as an internal standard for the quantification of JWH 200 (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).

JWH 200 is an aminoalkylindole that acts as a cannabinoid (CB) receptor ligand. It binds to the CB_1 receptor with high-affinity (IC_{50} = 7.8-42 nM).[1,2] The effects of JWH 200 in locomotor activity, tail-flick latency, hypothermia, and ring-immobility tests are comparable or superior to Δ^9-THC or WIN 55,212.[3] It potently inhibits the contraction of electrically-stimulated murine vas deferens (IC_{50} = 3.7-6.0 nM).[4,5]

References

1. Eissenstat, M.A., Bell, M.R., D'Ambra, T.E., *et al. J. Med. Chem.* **38**, 3094-3105 (1995).
2. Huffman, J.W., Mabon, R., Wu, M.-J., *et al. Bioorg. Med. Chem.* **11**, 539-549 (2003).
3. Compton, D.R., Gold, L.H., Ward, S.J., *et al. J. Pharmacol. Exp. Ther.* **263(3)**, 1118-1126 (1992).
4. Pacheco, M., Childers, S.R., Arnold, R., *et al. J. Pharmacol. Exp. Ther.* **257(1)**, 170-183 (1991).
5. Bell, M.R., D'Ambra, T.E., Kumar, V., *et al. J. Med. Chem.* **34**, 1099-1110 (1991).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10682

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