

Drug Status Report

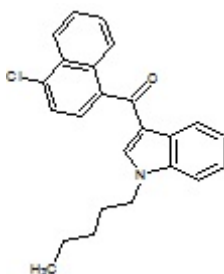
Drug: JWH-398

Drug Name Status: JWH-398 is the common name.

Other Names: 3-(4-Chloro-1-naphthoyl)-(1-pentyl)indole

Chemical Name: 4-Chloronaphthalen-1-yl-(1-pentylindol-3-yl)methanone

Chemical structure:



Molecular Formula: $C_{24}H_{22}ClNO$

Pharmacological class / Application: cannabinoid receptor ligand

International status:

US: The substance is not listed on the schedules to the US Controlled Substances Act.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International Control.

Canadian Status: JWH-398 is one of several series of synthetic cannabimimetic substances that was prepared to assess its affinity for the CB1 and CB2 receptors¹. It has been shown to have moderate affinity for both receptors. Its efficacy as an agonist or antagonist has not yet been

¹ JW Huffman, Cannabimimetic Indoles, Pyrroles, and Indenes: Structure–Activity Relationships and Receptor Interactions in The Cannabinoid Receptors, 2009 Patricia H. Reggio (editor).

assessed².

Status decisions have been made on several other cannabinoid receptor agonists and antagonists. See decisions for anandamide; methanandamide; WIN 555212; JWH 015; O-2050, CP55940, AM630, AM251 and SR 141716A. Cannabinoid receptor agonists have been declared to be included within item 1 of Schedule II to the CDSA by virtue of being “similar synthetic preparations.” Cannabinoid receptor antagonists have been declared to fall outside item 1 of Schedule II to the CDSA. Without evidence that JWH-398 is a cannabinoid receptor agonist, it should be considered to be not included in item 1 of Schedule II.

Recommendation: JWH-398 is not included in item 1 of Schedule II to the CDSA and is not a controlled substance.

October 14, 2009

² JW Huffman et al. *Bioorg Med Chem Lett*. 2005 Sep 15;15(18):4110-3.