

Drug Status Report

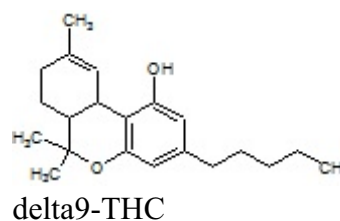
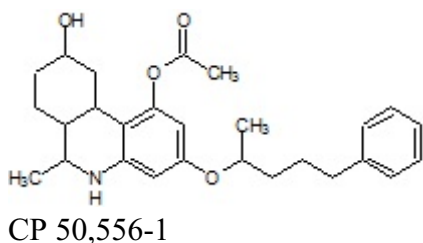
Drug: CP 50,556-1

Drug Name Status: CP 50,556-1 is the common name.

Other Names: Levonantradol is the proper (INN) name.

Chemical Name: (6S-(3(S*), 6alpha,6alpha, 9alpha,10abeta))-5,6,6a,7,8,9,10,10a-Octahydro-6-methyl-3-(1-methyl-4-phenylbutoxy)-1,9-phenanthridinediol, 1-acetate

Chemical structure:



Molecular Formula: C₂₅H₄₀O₃

Pharmacological class / Application: cannabinoid receptor agonist

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: Item 1 of Schedule II to the CDSA is, "Cannabis, its preparations, derivatives and similar synthetic preparations including:". Six chemical substances are listed under this heading: cannabidiol; cannabinal; nabilone; pyrahexyl; tetrahydrocannabinol; and DMPH. The chemical structures of CP 50,556-1 and Δ⁹-THC are shown above. CP 50,556-1 is a synthetic substance that is structurally similar to other cannabinoids listed in Schedule II to the CDSA. CP 50,556-1 is also a cannabinoid receptor agonist¹.

¹ Little PJ, Compton DR, Johnson MR, Melvin LS, Martin BR., J Pharmacol Exp Ther. 1988 Dec;247(3):1046-51.

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. Based on the similarity of its structure to the cannabinoids listed on Schedule II to the CDSA and its activity as a cannabinoid receptor agonist, CP 50,556-1 should be considered to be included in Schedule II to the Act.

Recommendation: CP 50,556-1 is included in item 1 of Schedule II to the CDSA and is a controlled substance.

October 15, 2009