

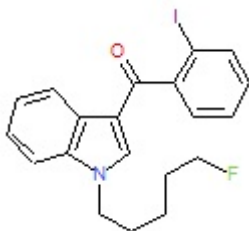
## Drug Status Report

**Drug:** AM 694

**Drug Name Status:** AM 694 is the common name.

**Chemical Name:** 1-(5-fluoropentyl)-3-(2-iodobenzoyl)indole

**Chemical structure:**



**Molecular Formula:** C<sub>20</sub>H<sub>19</sub>FINO

**Pharmacological class / Application:** Synthetic cannabinoid

**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: AM 694 is a synthetic cannabimimetic substance that has been reported in the literature to bind to the cannabinoid CB<sub>1</sub> and CB<sub>2</sub> receptors, with particularly high binding affinity for the CB<sub>1</sub> receptor<sup>1</sup>. The substance has also found potential use as a probe for *in vivo* imaging of the CB<sub>1</sub> receptor<sup>2</sup>. While the substance is claimed to be a potent cannabinoid receptor agonist, there is no data in the current scientific literature on the efficacy of the substance as a cannabinoid receptor agonist.

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. Although AM 694 is known to display high binding affinity for the CB<sub>1</sub> receptor, the substance cannot currently be included under item 1 of Schedule II to the CDSA as there is no evidence that the substance is an

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<sup>1</sup>Makriyannis, A and Deng, H. (2001) Cannabimimetic indole derivatives, WIPO Patent WO200128557.

<sup>2</sup>Wills, PG *et al.* (2003) Regioselective F-18 radiolabeling of AM694, a CB1 cannabinoid receptor ligand, *J. Labelled Compd Radiopharm.* **46**:799-804.

efficacious cannabinoid receptor agonist. The decision not to include JWH-250 under item 1 of Schedule II to the CDSA was also based on the lack of evidence that JWH-250 is an efficacious cannabinoid receptor agonist.

Recommendation: AM694 is not included in item 1 of Schedule II to the CDSA and is not a controlled substance.

September 20<sup>th</sup>, 2010