

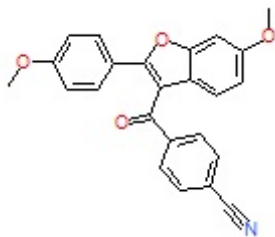
## Drug Status Report

**Drug:** LY320135

**Drug Name Status:** LY320135 is the common name.

**Chemical Name:** 4-[6-methoxy-2-(4-methoxyphenyl)benzofuran-3-carbonyl]benzonitrile

**Chemical structure:**



**Molecular Formula:** C<sub>17</sub>H<sub>17</sub>N<sub>5</sub>O

**Pharmacological class / Application:** Cannabinoid CB<sub>1</sub> receptor antagonist

**International status:**

US: The substance is not listed on the schedules to the CSA and is not mentioned on the DEA website.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control. The drug is not listed on the Green List - List of Psychotropic Substances under International Control.

Canadian Status: LY 320135 was among a number of compounds that were synthesized and evaluated for their efficacy as selective cannabinoid CB<sub>1</sub> receptor antagonists<sup>1</sup>. The affinity of LY 320135 for the CB<sub>1</sub> receptor is reported to be 70 times greater than that of the CB<sub>2</sub> receptor and the substance has been shown in functional assays to display potent CB<sub>1</sub> receptor antagonist activity. 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. Given that LY 320135 is potent cannabinoid receptor antagonist, the substance should not be included in item 1 of Schedule II.

**Recommendation:** LY 320135 is not included in Schedule II to the CDSA and is a not controlled substance.

January 7<sup>th</sup>, 2010

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<sup>1</sup>Felder, CC *et al.* (1998) LY320135, a novel cannabinoid CB<sub>1</sub> receptor antagonist, unmasks coupling of the CB<sub>1</sub> receptor to stimulation of cAMP accumulation, *J. Pharmacol. Expt. Ther.* **284**: 291-297.

