

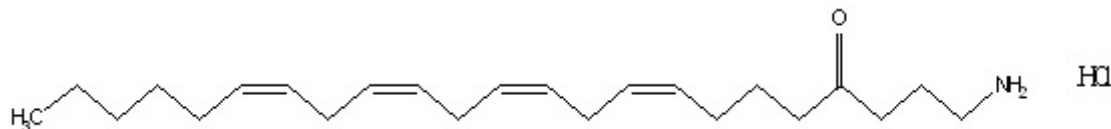
Drug Status Report

Drug: Virodhamine hydrochloride

Drug Name Status: O-Arachidonoyl ethanolamide hydrochloride

Chemical Name: 2-aminoethyl(5Z,8Z,11Z,14Z)-icosa-5,8,11,14-tetraenoate

Chemical structure:



Molecular Formula: C₂₃H₃₉NO.HCl

Pharmacological class / Application: Endocannabinoid

International status:

US: Virodhamine is not listed in 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: Virodhamine is an endogenous endocannabinoid that has been shown to bind to the cannabinoid receptors and behave as a partial agonist CB₁ receptor but as a full agonist at the CB₂ receptor. *In vivo* studies revealed that virodhamine decreased body temperature *via* the activation of the CB₁ receptors albeit to a slightly lesser degree than anandamide. When the virodhamine and anandamide were co-administered, antagonist activity of virodhamine at the CB₁ receptor was observed.

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, however, have been declared to fall outside item 1 of Schedule II to the CDSA. Virodhamine is an effective cannabinoid receptor agonist with antagonist activity at the CB₁ receptor and thus is considered to be included under item 1 of Schedule II to the CDSA.

Recommendation: Virodhamine is included in item 1 of Schedule II to the CDSA and is a controlled substance.

April 8th, 2010.