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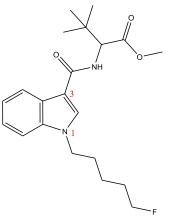
5F-MDMB-PICA (5F-MDMB-2201)

Introduction:

In recent years, various products containing synthetic cannabinoids (e.g., JWH-018, UR-144, AKB48, etc.) laced on plant material have been encountered by law enforcement and are smoked for their psychoactive effects. In response to Federal control of these synthetic cannabinoids, a transition to new synthetic cannabinoids laced on plant material has been observed. 5F-MDMB-PICA is a synthetic cannabinoid recently encountered on the designer drug market and has been found laced on plant material and marketed under the guise of herbal incense products.

Chemistry:

The chemical structure for 5F-MDMB-PICA¹ is shown below.



5F-MDMB-PICA is classified as an indole. 5F-MDMB-PICA is based on an indole core structure, where the 1- and 3-positions of the indole ring system are substituted. The 1position of 5F-MDMB-PICA is substituted with a linear five carbon chain terminated with a fluorine (F) atom. The 3position is substituted with an amide linker, and the nitrogen (N) atom of this linker is further substituted with a 1-methoxy-3,3-dimethyl-1-oxobutan-2-yl group.

Pharmacology:

Data from preclinical studies show that 5F-MDMB-PICA binds to and acts as an agonist at the CB1 receptor. In drug discrimination studies in rats, 5F-MDMB-PICA generalized to Δ 9-THC, i.e. produced subjective effects similar to those of Δ 9-THC.

There are no published studies on the safety of 5F-MDMB-PICA for human use.

Licit Uses:

There are no commercial or medical uses for 5F-MDMB-PICA.

Illicit Uses:

5F-MDMB-PICA has been encountered in numerous synthetic cannabinoid products that are smoked for their psychoactive effects.

User Population:

Information on user population in the U.S. is limited. 5F-MDMB-PICA abuse is not monitored by any national drug abuse surveys. Poison control centers continue to report adverse health effects in response to the abuse of synthetic cannabinoids and this abuse is both a public health and safety concern. Serious adverse effects including death have been reported following the use of 5F-MDMB-PICA.

Illicit Distribution:

According to DEA's National Forensic Laboratory Information System (NFLIS) Drug database, which collects scientifically verified data on drug items and cases submitted to and analyzed by federal, state, and local forensic laboratories, there have been over 10,400 reports of 5F-MDMB-PICA since it was first reported in 2014, with a peak of over 5,700 reports in 2019.

Control Status

5F-MDMB-PICA is a Schedule I controlled substance under the Federal Controlled Substances Act.

Comments and additional information are welcomed by the Drug and Chemical Evaluation Section; Fax 571-362-4250, Telephone 571-362-3249, or E-mail DPE@dea.gov.

¹ Chemical name: Methyl 2-(1-(5-fluoropentyl)-1*H*-indole-3-carboxamido)-3,3-dimethylbutanoate