EU EARLY WARNING SYSTEM FORMAL NOTIFICATION

Date issued	19 January 2022	RCS ID	EU-EWS-RCS-FN-2022-0002
Issued by	EMCDDA	Transmitted by	Action on New Drugs Sector, EMCDDA
Subject	Formal notification of <i>N</i> -(1-amino-3,3-dimethyl-1-oxobutan-2-yl)-1-(4-fluorophenyl)methyl-1,4-dihydroquinoline-3-carboxamide (ADB-FUBHQUCA) by Turkey as a new psychoactive substance under the terms of Regulation (EC) No 1920/2006 and Council Framework Decision 2004/757/JHA		

1. Read me first

This document provides formal notification of the analytical identification of N-(1-amino-3,3-dimethyl-1-oxobutan-2-yl)-1-(4-fluorophenyl)methyl-1,4-dihydroquinoline-3-carboxamide (ADB-FUBHQUCA) for the first time in Europe.

Please report any additional data you have on this substance to: ews@emcdda.europa.eu

2. Data use restrictions

As with all formal notifications issued by the EU EWS remember that they may contain information that could be regarded as sensitive. Should you provide some of the information in this notification to other groups we would ask that you exercise your best judgment on what information needs to be provided. If you have any questions in this respect, please contact us.

3. Names of substance and other identifiers

- IUPAC name: *N*-(1-amino-3,3-dimethyl-1-oxobutan-2-yl)-1-(4-fluorophenyl)methyl-1,4-dihydroquinoline-3-carboxamide
- Chemical names: *N*-(1-carbamoyl-2,2-dimethyl-propyl)-1-[(4-fluorophenyl)methyl]-4*H*-quinoline-3-carboxamide
- Common name: ADB-FUBHQUCA
 Chemical formula: C₂₃H₂₆FN₃O₂
- Molecular weight: 395.47
- CAS Registry number: not registered.
- InChikey: WEFDGWANUSMUJL-UHFFFAOYSA-N

Molecular structure

4. Substance classification

Synthetic cannabinoid

5. Detection

Type: Seizure

Case Report identifier: EDND-CR-2022-2

Details: ADB-FUBHQUCA was identified in 2066 grams of yellow powder seized by the DG Custom Units at Istanbul İnternational Airport on 14 September 2021. The substance was seized in a cargo parcel (2 plastic packages each containing approximately one kilogram) en-route from Hong Kong SAR to an address in Istanbul via air cargo.

The substance was analytically confirmed using GC-MS, LC-MS, FTIR and NMR by Ankara University - Faculty of Pharmacy laboratory.

6. Chemistry and Analysis

Chemical classification: azacyclic; dihydroquinoline

ADB-FUBHQUCA is a synthetic cannabinoid that contains a dihydroquinoline core (HQU), an amino dimethyl butanone linked group (ADB), a fluorobenzyl tail (FUB) and a carboxamide linker (CA). ADB-FUBHQUCA is structurally similar to the internationally controlled <u>ADB-FUBINACA</u> (Schedule II of the 1971 United Nations Single Convention on Psychotropic Substances). ADB-FUBHQUCA differs from ADB-FUBINACA due to the replacement of the indazole core with a dihydroquinoline core.

ADB-FUBHQUCA, <u>5F-APP-PICA</u> and <u>ADB-FUBIACA</u>, formally notified in 2014 and 2021 respectively, are structural isomers. ADB-FUBHQUCA differs from ADB-FUBIACA in the core and linker, ADB-FUBIACA contains an indole core and an acetamide linker whereas ADB-FUBHQUCA contains a dihydroquinoline core and a carboxamide linker. ADB-FUBHQUCA and 5F-APP-PICA contain different cores, linked groups and tails. The identification and discrimination of structural isomers can pose analytical challenges due to the fact that these substances have the same molecular weight and similar fragmentation patterns.

ADB-FUBHQUCA shares structural similarities with other quinoline based synthetic cannabinoids such as <u>FUB-PB-22</u> and <u>JTE-907</u>, formally notified in 2013, and <u>FUB-NPB-22</u> and <u>2F-QMPSB</u>, formally notified in 2016 and 2019, respectively.

7. Pharmacology and toxicology

Pharmacological classification: cannabinoid

There is no information available on the pharmacology and toxicology of ADB-FUBHQUCA. Based on its structural similarity with other synthetic cannabinoids, such as ADB-FUBINACA, ADB-FUBHQUCA is expected to act as a cannabinoid receptor agonist.

8. Further information

Further information on this substance is available on the EDND profile: https://ednd2.emcdda.europa.eu/ednd/substanceProfiles/1292

9. Acknowledgements

The Turkish National Focal Point, the DG Custom Units, the Customs Laboratory, Prof.Dr.Hakan Göker and Ankara University - Faculty of Pharmacy laboratory are kindly acknowledged for the information and analytical data provided.

10. Attachments

None.

11. References

None.