



## EU EARLY WARNING SYSTEM FORMAL NOTIFICATION

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Date issued	14 December 2021	RCS ID	EU-EWS-RCS-FN-2021-0047
Issued by	EMCDDA	Transmitted by	Action on New Drugs Sector, EMCDDA
Subject	Formal notification of <i>N</i> -(1-carbamoyl-2,2-dimethyl-propyl)-5-(4-fluorophenyl)-2-pent-4-enyl-pyrazole-3-carboxamide (3,5-ADB-4en-PFUPPYCA) by Hungary as a new psychoactive substance under the terms of Regulation (EC) No 1920/2006 and Council Framework Decision 2004/757/JHA		

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### 1. Read me first

This document provides formal notification of the analytical identification of *N*-(1-carbamoyl-2,2-dimethyl-propyl)-5-(4-fluorophenyl)-2-pent-4-enyl-pyrazole-3-carboxamide (3,5-ADB-4en-PFUPPYCA) for the first time in Europe.

Please report any additional data you have on this substance to: [ews@emcdda.europa.eu](mailto:ews@emcdda.europa.eu)

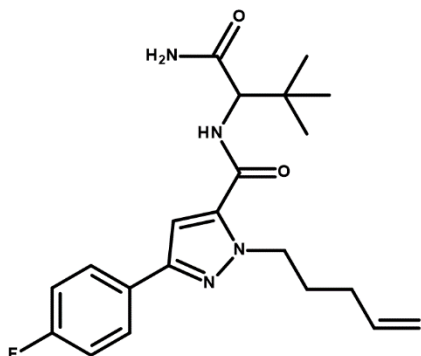
### 2. Data use restrictions

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-carbamoyl-2,2-dimethyl-propyl)-5-(4-fluorophenyl)-2-pent-4-enyl-pyrazole-3-carboxamide
- Chemical names: *N*2-[3-(4-fluorophenyl)-1-(pent-4-en-1-yl)-1*H*-pyrazole-5-carbonyl]-3-methylvalinamide
- Common name: 3,5-ADB-4en-PFUPPYCA
- Chemical formula: C<sub>21</sub>H<sub>27</sub>FN<sub>4</sub>O<sub>2</sub>
- Molecular weight: 386.46
- CAS Registry number: not registered.
- InChIKey: JPCQBOGNKSMAIE-UHFFFAOYSA-N

## Molecular structure



#### 4. Substance classification

Synthetic cannabinoid

#### 5. Detection

Type: Seizure

Case Report identifier: EDND-CR-2021-1021

Details: 3,5-ADB-4en-PFUPPYCA was identified in 102.78 grams of yellow powder seized by Hungarian Police, in Veszprém, on 30 September 2021.

The substance was analytically confirmed using GC-MS, FTIR and NMR by the Hungarian Institute for Forensic Sciences, Drug Investigation Department.

##### *Other detections*

3,5-ADB-4en-PFUPPYCA was also identified in yellow powder seized by French Customs in postal freight at Ile-de-France airport on 13 August 2021. The seized sample was en-route from the Netherlands to France. The substance was analytically confirmed using GC-MS, LC-MS and FTIR by the French Customs Laboratory (SCL) Paris and NMR by the Joint Research Centre (JRC) in Ispra. Analysis confirmed that the seized sample contained a mixture of the regioisomers 3,5-ADB-4en-PFUPPYCA (approximately 10%) and 5,3-ADB-4en-PFUPPYCA (approximately 90%).

#### 6. Chemistry and Analysis

Chemical classification: azacyclic; azole; pyrazole

3,5-ADB-4en-PFUPPYCA is a pyrazole based synthetic cannabinoid, containing a pyrazole core (PY), a carboxamine linker (CA), an amino dimethyl butanone linked group (ADB), a pent-4-ene (4-en-P) and fluorophenyl (FUP) tail.

3,5-ADB-4en-PFUPPYCA and 5,3-ADB-4en-PFUPPYCA are regioisomers which differ only in the position of the substituents around the pyrazole core. The identification and discrimination of isomers can pose analytical challenges due to the fact that these substances have the same molecular weight and similar fragmentation patterns; as a result, in addition to GC-MS, additional analytical techniques, such as FTIR or NMR, may be required for their unequivocal identification.

3,5-ADB-4en-PFUPPYCA shares structural similarities with the pyrazoles rimonabant, 5F-AB-FUPPYCA (5F-5,3-AB-PFUPPYCA), 5F-3,5-AB-PFUPPYCA, 5,3-AB-CHMFUPPYCA and the indazole based synthetic cannabinoid ADB-4en-PINACA.

3,5-ADB-4en-PFUPPYCA contains a stereogenic centre and therefore two possible enantiomers may exist.

## 7. Pharmacology and toxicology

Pharmacological classification: cannabinoid

There is no information available on the pharmacology and toxicology of 3,5-ADB-4en-PFUPPYCA. Based on its structural similarity to other cannabinoids, 3,5-ADB-4en-PFUPPYCA 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/1268>

## 9. Acknowledgements

The Hungarian National Focal Point, Hungarian Police, Hungarian Institute for Forensic Sciences, Drug Investigation Department, the French National Focal Point, French Customs, the French Customs Laboratory and the Joint Research Centre are kindly acknowledged for the information and analytical data provided.

## 10. Attachments

None.

## 11. References

None.