

Emerging Designer Drug Monograph

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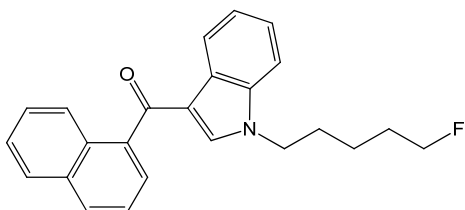
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Drug Name: AM-2201, see also JWH-018 (one of AM-2201's metabolites)

Synonyms: [1-(5-fluoropentyl)-1H-indol-3-yl]-1-naphthalenyl-methanone

CAS#: 335161-24-5

Structure:



Formula: C₂₄H₂₂FNO

Molecular Weight: 359.4

Pharmacological Drug Class: Cannabinoid, naphthoylalkylindole class. AM-2201 is a potent but nonselective full agonist for the cannabinoid receptor. Affinities are with a K_i of 1.0nM at CB₁ and 2.6nM at CB₂ (1).

Metabolism: Numerous metabolism products have been identified (1-7). These include: AM-2201 4-Hydroxypentyl Glucuronide, JWH-018 5-Hydroxypentyl Glucuronide, JWH-018 N-Pentanoic Acid, JWH-018 N-Propionic Acid, and JWH-073 N-Butanoic Acid and AM-2201 6-hydroxyindole. Many of these metabolites are in common with JWH-018 metabolites.

Blood Concentrations: Blood levels in one DUID study from Norway were reported as less than 0.5 ng/g (8). Logan and Yeakel reported results from a US study where results were 0.43-4.0 ng/mL (9). Other reports have reported similar levels (10-13).

Effects and Toxicity: Anecdotal reports of panic attacks and vomiting at doses as low as 2 mg. Convulsions may occur at doses over 10 mg (14). AM-2201 may be active at doses as low as 500 ug. It has a very steep dose-response curve and tolerance builds up quickly. There is a high potential for overdose and withdrawal symptoms. Due to batch variability there may be significant difference in effects (14-16). In one case, AM-2201 was found in the blood of a person who died from a stab wound to the neck (17).

Analysis: This drug in blood and serum (8-13), hair (18), oral fluid (19-21), and herbal mixtures (22-28). Metabolites of this drug have been detected in urine (29-31).

This is a simple neutral drug, with a low molecular. Analytical data are available in the references cited in the Forendex database and on SWGDRUG monographs.

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Effects and Toxicity

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SWGDRUG Monograph

<http://www.swgdrug.org/Monographs/AM2201.pdf>

Forendex Database

<http://forendex.southernforensic.org/index.php/detail/index/1097>