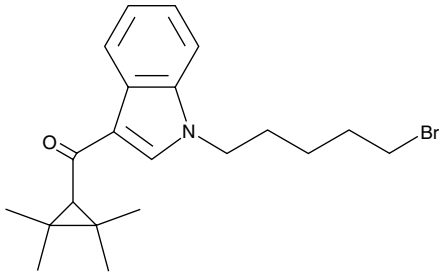
Product Information

UR-144 N-(5-bromopentyl) analog

Item No. 12003

CAS Registry No.: 1628690-26-5
Formal Name: [1-(5-bromopentyl)-1H-indol-3-yl] (2,2,3,3-tetramethylcyclopropyl)-methanone
Synonym: 5-bromo UR-144
MF: $C_{21}H_{28}BrNO$
FW: 390.4
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 217, 246, 304 nm



Laboratory Procedures

For long term storage, we suggest that UR-144 N-(5-bromopentyl) analog be stored as supplied at -20°C. It should be stable for at least two years.

UR-144 N-(5-bromopentyl) analog is supplied as a crystalline solid. A stock solution may be made by dissolving the UR-144 N-(5-bromopentyl) analog in the solvent of choice. UR-144 N-(5-bromopentyl) analog is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of UR-144 N-(5-bromopentyl) analog in ethanol and DMSO is approximately 5 mg/ml and approximately 14 mg/ml in DMF.

UR-144 N-(5-bromopentyl) analog is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, UR-144 N-(5-bromopentyl) analog should first be dissolved in DMF and then diluted with the aqueous buffer of choice. UR-144 N-(5-bromopentyl) analog has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

UR-144 (Item No. 11502) is a potent synthetic cannabinoid (CB) which preferentially binds the peripheral CB_2 receptor (K_i = 1.8 nM) over the central CB_1 receptor (K_i = 150 nM).[1] UR-144 N-(5-bromopentyl) analog differs from UR-144 by having a bromine atom on the terminal carbon of the alkyl group. While similar modifications have little effect on the receptor affinities of analogs of tetrahydrocannabinol, the activity of this compound has not been examined.[2,3] This product is intended for research and forensic applications.

References

1. Frost, J.M., Dart, M.J., Tietje, K.R., *et al.* Indol-3-ylcycloalkyl ketones: Effects of N1 substituted indole side chain variations on CB_2 cannabinoid receptor activity. *J. Med. Chem.* **53**, 295-315 (2010).
2. Nikas, S.P., Grzybowska, J., Papahatjis, D.P., *et al.* The role of halogen substitution in classical cannabinoids: A CB_1 pharmacophore model. *AAPS J.* **6(4)**, 1-13 (2004).
3. Nikas, S.P., Alapafuja, S.O., Papanastasiou, I., et al. Novel 1',1'-chain substituted hexahydrocannabinols: 9β-hydroxy-3-(1-hexyl-cyclobut-1-yl)-hexahydrocannabinol (AM2389) a highly potent cannabinoid receptor 1 (CB_1) agonist. *J. Med. Chem.* **53**, 6996-7010 (2010).

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