# **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<sub>21</sub>H<sub>28</sub>BrNO

FW: 390.4 **Purity:** ≥98%

Stability: ≥2 years at -20°C Supplied as: A crystalline solid UV/Vis.:  $\lambda_{max}$ : 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<sub>2</sub> receptor (K<sub>i</sub> = 1.8 nM) over the central CB<sub>1</sub> receptor (K<sub>i</sub> = 150 nM). 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.<sup>2,3</sup> 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<sub>2</sub> 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<sub>1</sub> pharmacophore model. AAPS J. 6(4), 1-13 (2004).
- 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<sub>1</sub>) agonist. J. Med. Chem. 53, 6996-7010 (2010).

## Related Products

For a list of related products please visit: www.caymanchem.com/catalog/12003

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will <u>meet our specifications</u>

purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry our its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days after arrival of the material at its destination.

thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

Copyright Cayman Chemical Company, 12/17/2014

custserv@caymanchem.com

Cayman Chemical

# **Mailing address**

1180 E. Ellsworth Road Ann Arbor, MI 48108 USA

Phone

(800) 364-9897 (734) 971-3335

(734) 971-3640

www.caymanchem.com