

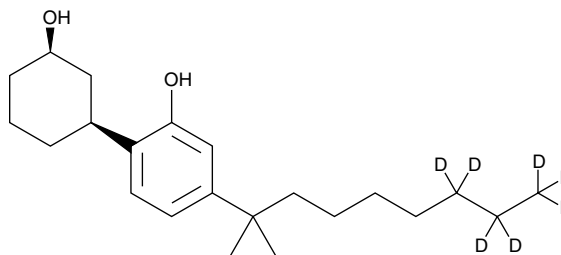
# Product Information



## (±)-CP 47,497-C8-homolog-d<sub>7</sub> (exempt preparation)

Item No. 10686

**Formal Name:** *rel*-2-[(1*S*,3*R*)-3-hydroxycyclohexyl]-5-(2-methylnonan-6,6,7,7,8,8,8-d<sub>7</sub>-2-yl)-phenol  
**MF:** C<sub>22</sub>H<sub>29</sub>D<sub>7</sub>O<sub>2</sub>  
**FW:** 339.6  
**Chemical Purity:** ≥98%  
**Deuterium Incorporation:** ≤1% d<sub>0</sub>  
**Stability:** ≥1 year at -20°C  
**Supplied as:** A solution in methanol  
**Packaged by:** Cayman Chemical Company



### Laboratory Procedures

(±)-CP 47,497-C8-homolog-d<sub>7</sub> (exempt preparation) contains seven deuterium atoms at the 6, 6', 7, 7', 8, 8, and 8 positions. It is intended for use as an internal standard for the quantification of (±)-CP 47,497-C8-homolog (exempt preparation) by GC- or LC-mass spectrometry (MS). For long term storage, we suggest that (±)-CP 47,497-C8-homolog-d<sub>7</sub> (exempt preparation) be stored as supplied at -20°C. It should be stable for at least one year.

(±)-CP 47,497-C8-homolog-d<sub>7</sub> (exempt preparation) is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of (±)-CP 47,497-C8-homolog-d<sub>7</sub> (exempt preparation) in these solvents is approximately 20 mg/ml.

(±)-CP 47,497-C8-homolog-d<sub>7</sub> (exempt preparation) is used as an internal standard for the quantification of (±)-CP 47,497-C8-homolog (exempt preparation) by stable isotope dilution MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

(±)-CP 47,497-C8-homolog is a bicyclic cannabinoid (CB) analog that avidly binds the CB<sub>2</sub> (K<sub>i</sub> = 0.83 nM) and shows high antinociceptive activity.<sup>1</sup> It is ten-fold more potent than Δ<sup>9</sup>-tetrahydrocannabinol in analgesic, motor depressant, anticonvulsant, and hypothermic effects in mice.<sup>2</sup>

### References

- Melvin, L.S., Milne, G.M., Johnson, M.R., *et al.* Structure-activity relationships for cannabinoid receptor-binding and analgesic activity: Studies of bicyclic cannabinoid analogs. *Mol. Pharmacol.* **44**, 1008-1015 (1993).
- Compton, D.R., Johnson, M.R., Melvin, L.S., *et al.* Pharmacological profile of a series of bicyclic cannabinoid analogs: Classification as cannabimimetic agents. *J. Pharmacol. Exp. Ther.* **260**(1), 201-209 (1992).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10686](http://www.caymanchem.com/catalog/10686)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### SAFETY DATA

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.

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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 shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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