

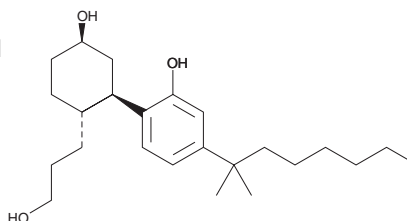
# PRODUCT INFORMATION



(-)-CP 55,940

Item No. 90084

**CAS Registry No.:** 83002-04-4  
**Formal Name:** 5-(1,1-dimethylheptyl)-2-[(1R,2R,5R)-5-hydroxy-2-(3-hydroxypropyl)cyclohexyl]-phenol  
**MF:** C<sub>24</sub>H<sub>40</sub>O<sub>3</sub>  
**FW:** 376.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 219, 277 nm  
**Supplied as:** A solution in methanol  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

(-)-CP 55,940 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 55,940 in these solvents is approximately 30 mg/ml.

(-)-CP 55,940 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of (-)-CP 55,940 should be diluted with the aqueous buffer of choice. (-)-CP 55,940 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method.

## Description

(-)-CP 55,940 is a potent and non-selective cannabinoid (CB) receptor agonist with K<sub>i</sub> values of 0.5 to 5 and 0.69 to 2.8 nM for CB<sub>1</sub> and CB<sub>2</sub> receptors, respectively.<sup>1</sup> It is considerably more potent than Δ<sup>9</sup>-THC (Item Nos. 12068 | ISO60157) in both behavioral tests and in receptor binding assays.<sup>2</sup> *In vivo*, (-)-CP 55,940 administered intraperitoneally (0.3-3 mg/kg) or as an aerosol (0.72-72 mg/ml), suppresses locomotor activity, increases tail flick latency in a hot plate test for analgesia, and decreases body temperature in mice in a dose-dependent manner.<sup>3</sup> Subchronic administration of (-)-CP 55,940 (0.03 mg/kg) also reduces body weight loss and running wheel activity in a rat model of anorexia nervosa.<sup>4</sup>

## References

1. Pertwee, R.G. Pharmacology of cannabinoid receptor ligands. *Curr. Med. Chem.* **6**(8), 635-664 (1999).
2. Wiley, J.L., Barrett, R.L., Lowe, J., *et al.* Discriminative stimulus effects of CP 55,940 and structurally dissimilar cannabinoids in rats. *Neuropharmacology* **34**(6), 669-676 (1995).
3. Lefever, T.W., Marusich, J.A., Thomas, B.F., *et al.* Vaping synthetic cannabinoids: A novel preclinical model of E-cigarette use in mice. *Subst. Abuse* **11**, (2017).
4. Scherma, M., Satta, V., Collu, R., *et al.* Cannabinoid CB1/CB2 receptor agonists attenuate hyperactivity and body weight loss in a rat model of activity-based anorexia. *Br. J. Pharmacol.* **174**(16), 2682-2695 (2017).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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