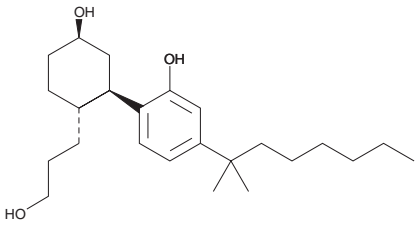
PRODUCT INFORMATION

(—)-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:	$C_{24}H_{40}O_3$
FW:	376.6
Purity:	≥98%
UV/Vis.:	λ_{max}: 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_i values of 0.5 to 5 and 0.69 to 2.8 nM for CB_1 and CB_2 receptors, respectively.[1] It is considerably more potent than Δ^9-THC (Item Nos. 12068 | ISO60157) in both behavioral tests and in receptor binding assays.[2] *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.[3] 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.[4]

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).

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