

PRODUCT INFORMATION



O-2545 (hydrochloride)

Item No. 10009195

CAS Registry No.: 874745-43-4

Formal Name: 6a,7,10,10a-tetrahydro-3-[5-(1H-imidazol-1-yl)-1,1-dimethylpentyl]-6,6,9-trimethyl-6H-dibenzo[b,d]pyran-1-ol, monohydrochloride

MF: $C_{26}H_{36}N_2O_2 \cdot HCl$

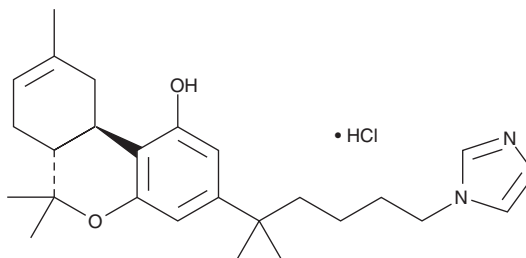
FW: 445.0

Purity: $\geq 98\%$

Stability: ≥ 2 years at $-20^\circ C$

Supplied as: A lyophilized powder

UV/Vis.: λ_{max} : 230, 282 nm



Laboratory Procedures

For long term storage, we suggest that O-2545 (hydrochloride) be stored as supplied at $-20^\circ C$. It should be stable for at least two years.

O-2545 (hydrochloride) is supplied as a lyophilized powder. A stock solution may be made by dissolving the lyophilized powder in the solvent of choice. O-2545 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of O-2545 (hydrochloride) in these solvents is approximately 20 mg/ml.

O-2545 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the lyophilized powder should first be dissolved in DMF and then diluted with the aqueous buffer of choice. O-2545 (hydrochloride) 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.

Description

Cannabinoid agonists are typically highly lipophilic compounds that require solubilization with either a surfactant agent or adherence to a water miscible substance such as albumin, Tween 80, or Emulphor. O-2545 is a potent water-soluble agonist of central cannabinoid (CB_1) and peripheral cannabinoid (CB_2) receptors with K_i values of 1.5 and 0.32 nM, respectively.¹ When dissolved in saline, O-2545 was highly efficacious in mouse behavioral models when administered either intravenously or intracerebroventricularly.¹

References

1. Martin, B.R., Wiley, J.L., Beletskaya, I., *et al.* Pharmacological characterization of novel water-soluble cannabinoids. *J. Pharmacol. Exp. Ther.* **318**, 1230-1239 (2006).

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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