PRODUCT INFORMATION



O-1918

Item No. 10004914

CAS Registry No.: 536697-79-7

Formal Name: 1,3-dimethoxy-5-methyl-2-[(1R,6R)-3-methyl-6-

(1-methylethenyl)-2-cyclohexen-1-yl]-benzene

MF: $C_{19}H_{26}O_{2}$ FW: 286.4 **Purity:** ≥95%

Supplied as: A solution in methyl acetate

Storage: -20°C Stability: ≥5 years

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

Laboratory Procedures

O-1918 is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate 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 O-1918 in these solvents is approximately 30 mg/ml.

O-1918 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of O-1918 should be diluted with the aqueous buffer of choice. O-1918 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Abnormal cannabidiol is a synthetic regioisomer of cannabidiol that fails to elicit either central cannabinoid (CB₁) or peripheral cannabinoid (CB₂) responsiveness and is without psychotropic activity. It induces endothelium-dependent vasodilation via a CB₁/CB₂/nitric oxide-independent mechanism.¹ O-1918 is a cannabidiol analog that acts as a selective antagonist of abnormal cannabidiol at the non-CB₁/CB₂ endothelial receptor. It does not bind to CB1 or CB2 receptors at concentrations up to 30 µM and inhibits the vasorelaxant effects of abnormal cannabidiol in vitro and in whole animals.2 It also blocks the abnormal cannabidiol-induced activation of the phosphatidylinositol 3-kinase/Akt pathway in human umbilical vein endothelial cells.2

References

- 1. Járai, Z., Wagner, J.A., Varga, K., et al. Cannabinoid-induced mesenteric vasodilation through an endothelial site distinct from CB₁ or CB₂ receptors. Proc. Natl. Acad. Sci. USA 96(24), 14136-14141 (1999).
- 2. Offertáler, L., Mo, F.-M., Bátkai, S., et al. Selective ligands and cellular effectors of a G protein-coupled endothelial cannabinoid receptor. Mol. Pharmacol. 63(3), 699-705 (2003).

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

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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