

Product Data Sheet

Product Name: β -Caryophyllene-d₂

Cat. No.: GC71980

Chemical Properties

Cas. No. 2006272-96-2

Formula C₁₅H₂₂D₂ M.Wt 206.36

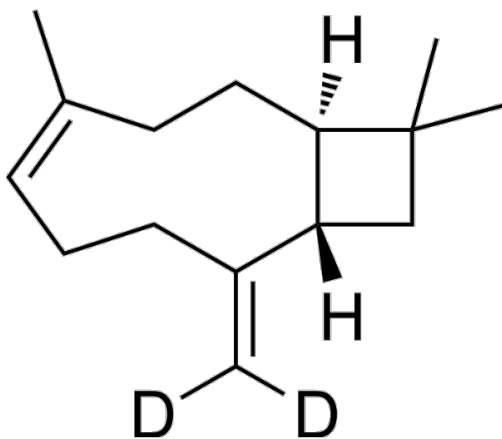
Solubility Ethanol : ≥ 176.67 mg/mL (856.13 mM); DMSO : 50 mg/mL (242.30 mM); ultrasonic and warming and heat to 60°C); H₂O : 0.67 mg/mL (3.25 mM; Need ultrasonic)

Storage 4°C, protect from light

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

β -Caryophyllene-d₂ is deuterium labeled β -Caryophyllene. β -Caryophyllene is a CB₂ receptor agonist.

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug

Caution: Product has not been fully validated for medical applications. For research use only.

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molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs^[1].

References:

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-216.
- [2]. Cheng Y, et al. β -Caryophyllene ameliorates the Alzheimer-like phenotype in APP/PS1 Mice through CB2 receptor activation and the PPAR γ pathway. *Pharmacology*. 2014;94(1-2):1-12.
- [3]. Dahham SS, et al. The Anticancer, Antioxidant and Antimicrobial Properties of the Sesquiterpene β -Caryophyllene from the Essential Oil of *Aquilaria crassna*. *Molecules*. 2015 Jun 26;20(7):11808-29.
- [4]. de Oliveira CC, et al. Anticonvulsant activity of β -caryophyllene against pentylenetetrazol-induced seizures. *Epilepsy Behav*. 2016 Mar;56:26-31.

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