

Product Data Sheet

Product Name: Curcumin-d6

Cat. No.: GC40226

Chemical Properties

Cas. No. 1335198-02-1

SMILES OC(/C=C/C1=CC(OC([2H])([2H])[2H])=C(O)C=C1)=C\C(/C=C/C2=CC(OC([2H])([2H])[2H])=C(O)C=C2)=O

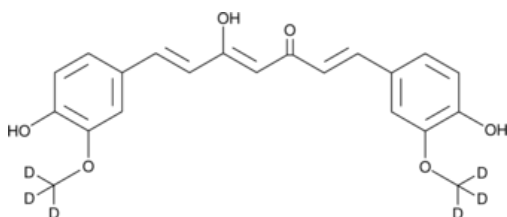
Formula C₂₁H₁₄D₆O₆ M.Wt 374.4

Solubility 0.1 M NaOH: >3 mg/ml, Acetone: >20 mg/ml Storage Store at -20°C

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

Curcumin-d6 is intended for use as an internal standard for the quantification of curcumin by GC- or LC-MS. Curcumin is the major yellow pigment in turmeric and curry and has antioxidant, anti-inflammatory, and antitumor activities. It inhibits nitric oxide (NO) production (IC₅₀ = 6 μM) and reduces inducible nitric oxide synthase (iNOS) activity in LPS-stimulated RAW 264.7 cells. Curcumin inhibits release of histamine and the inflammatory cytokines TNF-α, IL-1β, IL-6, and IL-8 from HMC-1 mast cells. In vivo, curcumin decreases serum levels of histamine and TNF-α, inhibits histopathological changes of nasal mucosa, and decreases the number of sneezes and nasal rubbing in a mouse model of ovalbumin-induced rhinitis. Curcumin (100 or 200 mg/kg) prevents ovalbumin-induced accumulation of 3-nitrotyrosine (3-NT), a marker of oxidative stress, in mouse heart. Topical administration of curcumin (1-10 μmol) reduces the number of tumors induced by phorbol 12-myristate 13-acetate in mouse skin. Dietary administration of curcumin reduces the number of tongue

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

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neoplasms and preneoplastic lesions induced by 4-nitroquinoline 1-oxide (4-NQO) in rats.

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