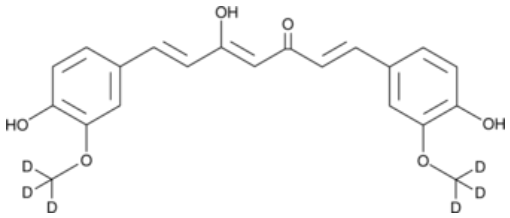
Product Data Sheet

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

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