

Product Data Sheet

Product Name: Quercetin-d3 (hydrate)

Cat. No.: GC48020

Chemical Properties

Cas. No. N/A

SMILES OC1=CC(O)=C(C(C(O)=C(C2=C([2H])C([2H])=C(O)C(O)=C2[2H])O3)=O)C3=C1.O

Formula C₁₅H₇D₃O₇.XH₂O

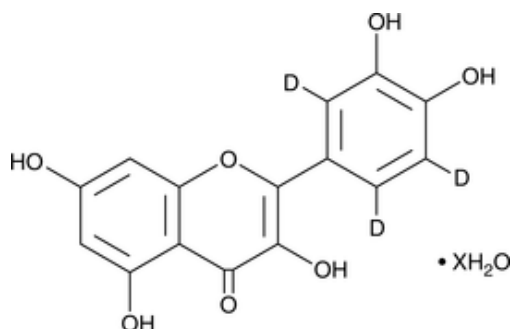
M.Wt 305.3

Solubility DMSO: slightly soluble, Methanol: slightly soluble
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

Quercetin-d₃(hydrate) is intended for use as an internal standard for the quantification of quercetin by GC- or LC-MS. Quercetin is an abundant flavonoid that has been isolated from a variety of plants and has diverse biological activities, including antioxidant, anticancer, and anti-inflammatory properties.^{1,2,3} Quercetin (5-100 mg/kg) reduces autophagy, decreases the levels of reactive oxygen species (ROS) and malondialdehyde (MDA) content, and increases total antioxidant capacity in the kidney in a mouse model of cadmium-induced autophagy.² It reduces tumor growth, induces apoptosis, and halts the cell cycle at the G₁ phase in an HL60 mouse xenograft model when administered at a dose of 120 mg/kg every four days.¹ Quercetin (30 μM) also inhibits histamine

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

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release from antigen-stimulated RBL-2H3 cells and decreases the expression of TNF- α , IL-1 β , IL-6, and IL-8 induced by PMACI in HMC-1 cells.³

1.Calgarotto, A.K., Maso, V., Junior, G.C.F., et al.Antitumor activities of quercetin and green tea in xenografts of human leukemia HL60 cellsSci. Rep.8(1)3459(2018) 2.Yuan, Y., Ma, S., Qi, Y., et al.Quercetin inhibited cadmium-induced autophagy in the mouse kidney via inhibition of oxidative stressJ. Toxicol. Pathol.29(4)247-252(2016) 3.Park, H.H., Lee, S., Son, H.Y., et al.Flavonoids inhibit histamine release and expression of proinflammatory cytokines in mast cellsArch. Pharm. Res.31(10)1303-1311(2008)

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