

Product Data Sheet

Product Name: Pentaacetylquercetin

Cat. No.: GC40189

Chemical Properties

Cas. No. 1064-06-8

SMILES CC(OC1=CC=C(C2=C(OC(C)=O)C(C(C(OC(C)=O)=CC(OC(C)=O)=C3)=C3O2)=O)C=C1OC(C)=O)=O

Formula C₂₅H₂₀O₁₂

M.Wt 512.4

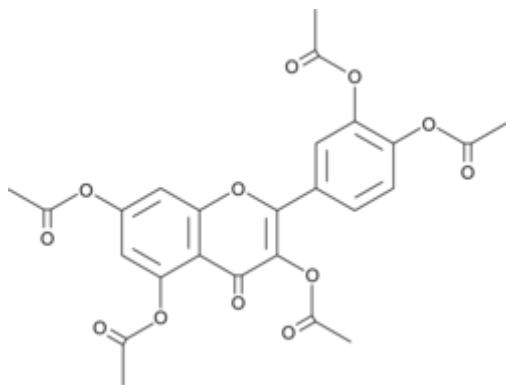
Solubility DMF: 30 mg/mL, DMSO: 30 mg/mL, DMSO: PBS (pH 7.2) (1:4): 1 mg/mL, Ethanol: 2 mg/mL

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

Pentaacetylquercetin is a pentaacetylated derivative of the flavonoid quercetin that has diverse

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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biological activities, including antioxidant, anti-inflammatory, and anticancer properties. It scavenges 2,2-diphenyl-1-picrylhydrazyl radicals in vitro ($IC_{50} = 3.74 \mu\text{g/ml}$) and inhibits iron(II) chloride-induced lipid peroxidation in rat liver mitochondria ($IC_{50} = 20.2 \mu\text{g/ml}$). Pentaacetylquercetin inhibits LPS-induced increases in nitrite ($IC_{50} = 8.7 \mu\text{M}$) and PGE2 production, as well as inducible nitric oxide synthase (iNOS) and COX-2 levels, in RAW 264.7 cells when used at concentrations of 20 and 40 μM . It also inhibits the growth of HL-60, U937, and SK-MEL-1 cells (IC_{50} s = 38, 25, and 58 μM , respectively).

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