

Product Data Sheet

Product Name: Ritonavir-d6

Cat. No.: GC40221

Chemical Properties

Cas. No. 1217720-20-1

Formula C₃₇H₄₂D₆N₆O₅S₂

M.Wt 727

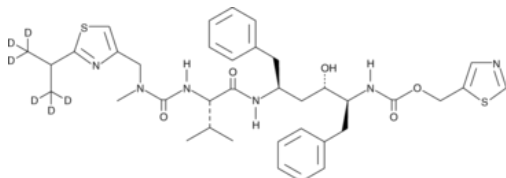
Solubility DMF : ≥ 15 mg/mL (20.63 mM);
DMSO : ≥ 15 mg/mL (20.63 mM);
Ethanol : ≥ 5 mg/mL (6.88 mM);
DMSO:PBS(pH 7.2) (1:2) : ≥ 0.1
mg/mL (0.14 mM)

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

Ritonavir-d6 is intended for use as an internal standard for the quantification of ritonavir by GC- or LC-MS. Ritonavir is an HIV protease inhibitor. It inhibits recombinant HIV-1 protease by 79% when used at a concentration of 0.5 nM. It inhibits HIV-13B-induced cell death in MT-4 human T cell leukemia cells (EC₅₀ = 25 nM) as well as cell death induced by HIV-1LAI, HIV-2ROD, and HIV-2EHO in human MT-2 cells (IC₅₀s = 0.045, 0.13, and 0.24 μ M, respectively). Ritonavir also inhibits the cytochrome P450 (CYP) isoform CYP3A (IC₅₀ = 0.14 μ M). It inhibits CYP-mediated oxidative metabolism of the HIV protease inhibitors saquinavir , indinavir , nelfinavir , and amprenavir in rat and human liver microsomes in a concentration-dependent manner. Ritonavir (10 mg/kg) also prevents decreases in plasma levels of these four compounds in rats. Formulations containing ritonavir have

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

Product Data Sheet

been used in the treatment of HIV-1 infection.

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