

Product Data Sheet

Product Name: Seco Rapamycin ethyl ester

Cat. No.: GC61272

Chemical Properties

Cas. No.

SMILES C[C@H]1[C@@](C(C(N2[C@H](C(OCC)=O)CCCC2)=O)=O)(O)O[C@H](C[C@H](OC)/C(C)=C/C=C/C=C/[C@@H](C)C[C@@H](C)C([C@H](OC)[C@H](O)/C(C)=C/[C@@H](C)C(/C=C/[C@H](C)C[C@@H]3CC[C@@H](O)[C@H](OC)C3)=O)=O)CC1

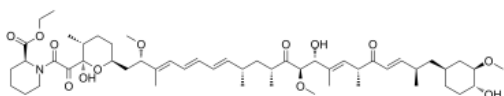
Formula C₅₃H₈₃NO₁₃ M.Wt 942.23

Solubility DMSO : 100 mg/mL (106.13 mM; Need ultrasonic) Storage -20°C, protect from light, stored under nitrogen

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

Seco Rapamycin ethyl ester is an open-ring metabolite of Rapamycin derivative. Seco-rapamycin is reported not to affect the mTOR function[1].

Disposition of Seco Rapamycin in Human Tissue Homogenates and Caco-2 Cell Monolayers. To

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determine whether Seco Rapamycin (D2) can be metabolized to dihydro Sirolimus (M2), 20 μ M Seco Rapamycin is incubated with human liver, jejunal mucosal, and Caco-2 homogenates. All of these homogenates produced M2 in an NADPH-dependent manner. Ketoconazole, at a high concentration (100 μ M), has no effect on the formation of M2 in any of the homogenates examined. To determine whether Seco Rapamycin can be metabolized to M2 in intact cells, 20 μ M Seco Rapamycin is added to Caco-2 cell monolayers. When applied to the apical compartment, little Seco Rapamycin is detected in the basolateral compartment and in the cellular fraction after 4 h. In addition, little M2 is detected. LY335979 has little effect on the distribution of Seco Rapamycin after an apical dose, although M2 became detectable in the apical compartment. In contrast, when Seco Rapamycin is applied to the basolateral compartment, both Seco Rapamycin and M2 are readily detected in the apical compartment; LY335679 decreases the flux of Seco Rapamycin to the apical compartment and increases the amount of M2 in both apical and basolateral compartments[1].

[1]. Paine MF, et al. Identification of a novel route of extraction of sirolimus in human small intestine: roles of metabolism and secretion. J Pharmacol Exp Ther. 2002 Apr;301(1):174-86.

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