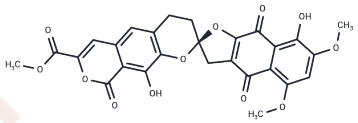
Data Sheet (Cat.No.T35428)

TargetMol

β-Rubromycin

Chemical Properties



CAS No. : 27267-70-5

Formula: C27H20O12

Molecular Weight: 536.445

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	β-Rubromycin is a bacterial metabolite originally isolated from Streptomyces that has diverse biological activities.1 It inhibits the growth of HMO2, KATO-III, and MCF-7 cells with GI50 values of 0.5, 0.84, and <0.1 μM, respectively. β-rubromycin inhibits HIV-1 reverse transcriptase activity by 39.7% when used at a concentration of 10 μM. It also has antibacterial activity against Gram-positive bacteria. The structure of β-rubromycin was originally described as containing an ortho-quinone group, but it was revised to a para-quinone group in 2000 using organic and biosynthetic methods, as well as spectroscopic analysis.1,2,3
Targets(IC50)	Others,HIV Protease,Reverse Transcriptase,Antibiotic

Solubility Information

Solubility	DMSO: 1 mg/mL (1.86 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8641 mL	9.3205 mL	18.6411 mL
5 mM	0.3728 mL	1.8641 mL	3.7282 mL
10 mM	0.1864 mL	0.9321 mL	1.8641 mL
50 mM	0.0373 mL	0.1864 mL	0.3728 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Ueno, T., Takahashi, H., Oda, M., et al. Inhibition of human telomerase by rubromycins: Implication of spiroketal system of the compounds as an active moiety. Biochemistry 39(20), 5995-6002 (2000).
Puder, C., Loya, S., Hizi, A., et al. Structural and biosynthetic investigations of the rubromycins. Eur. J. Org. Chem. 2000(5), 729-735 (2000).
Goldman, M.E., Salituro, G.S., Bowen, J.A., et al. Inhibition of human immunodeficiency virus-1 reverse transcriptase activity by rubromycins: Competitive interaction at the template.primer site. Mol. Pharmacol. 38(1), 20-25 (1990).

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