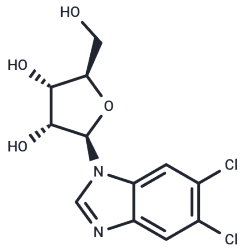
Data Sheet (Cat.No.T7789)

DRB

Chemical Properties



CAS No. : 53-85-0

Formula: C12H12Cl2N2O4

Molecular Weight: 319.14

Storage: Store at low temperature
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	DRB is a nucleoside analog that inhibits several carboxyl-terminal domain (CTD) kinases including casein kinase II (IC50 range of 4-10 μM)
Targets(IC50)	Apoptosis,HIV Protease,CDK
In vitro	DRB can inhibit HIV transcription (IC50 = ~4 μM) by targeting elongation enhanced by the HIV-encoded transactivator Tat[1].

Solubility Information

Solubility	DMSO: 130 mg/mL (407.34 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (3.13 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1334 mL	15.6671 mL	31.3342 mL
5 mM	0.6267 mL	3.1334 mL	6.2668 mL
10 mM	0.3133 mL	1.5667 mL	3.1334 mL
50 mM	0.0627 mL	0.3133 mL	0.6267 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

Marciniak R A , Sharp P A . HIV-1 Tat protein promotes formation of more-processive elongation complexes.[J]. Embo Journal, 1991, 10(13):4189-4196.

Zandomeni R O . Kinetics of inhibition by 5,6-dichloro-1-beta-D-ribofuranosylbenzimidazole on calf thymus casein kinase II[J]. biochemical journal, 1989, 262(2):469-473.