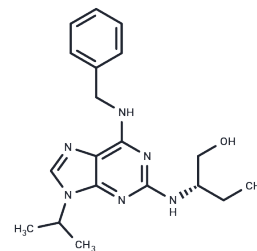


## (S)-Roscovitine

## Chemical Properties

CAS No. :	186692-45-5
Formula:	C <sub>19</sub> H <sub>26</sub> N <sub>6</sub> O
Molecular Weight:	354.45
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	(S)-Roscovitine is a potent, selective CDK inhibitor (CDK2/CyclinE IC <sub>50</sub> = 0.7 μM). It induces apoptosis by blocking cell cycle progression, utilized for cancer and inflammatory disease research.
Targets(IC <sub>50</sub> )	CDK
In vivo	(S)-Roscovitine (25 mg/kg i.p.) reduces total infarct volume and inhibits aberrant CDK5 activity in cerebral ischemia models [1][2].

## Solubility Information

Solubility	DMSO: 40 mg/mL (112.85 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8213 mL	14.1064 mL	28.2127 mL
5 mM	0.5643 mL	2.8213 mL	5.6425 mL
10 mM	0.2821 mL	1.4106 mL	2.8213 mL
50 mM	0.0564 mL	0.2821 mL	0.5643 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

Waiker DK, et al. Development and Evaluation of Some Molecular Hybrids of N-(1-Benzylpiperidin-4-yl)-2-((5-phenyl-1,3,4-oxadiazol-2-yl)thio) as Multifunctional Agents to Combat Alzheimer's Disease. ACS Omega. 2023 Mar 2;8(10):9394-9414.

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