

(R)-CR8

## Chemical Properties

CAS No. : 294646-77-8

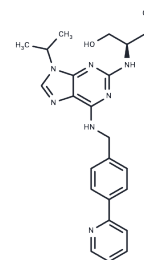
Formula: C<sub>24</sub>H<sub>29</sub>N<sub>7</sub>O

Molecular Weight: 431.53

Keep away from direct sunlight

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	(R)-CR8 ((R)-Isomer) is a potent and selective CDK inhibitor.
Targets(IC50)	Apoptosis,CDK,Molecular Glues
In vivo	A delayed systemic post-LFP administration at 3 hours of CR8--a potent second-generation cyclin-dependent kinase (CDK) inhibitor--reduced CCA;?cortical, hippocampal, and thalamic neuronal loss;?and cortical microglial and astrocyte activation.?Furthermore, CR8 treatment attenuated sensorimotor and cognitive deficits, alleviated depressive-like symptoms, and decreased lesion volume[1].

## Solubility Information

Solubility	DMSO: 125 mg/mL (289.67 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (23.17 mM),Solution. <i>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.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	2.3173 mL	11.5867 mL	23.1734 mL
5 mM	0.4635 mL	2.3173 mL	4.6347 mL
10 mM	0.2317 mL	1.1587 mL	2.3173 mL
50 mM	0.0463 mL	0.2317 mL	0.4635 mL

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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

Kabadi SV, et al. CR8, a novel inhibitor of CDK, limits microglial activation, astrocytosis, neuronal loss, and neurologic dysfunction after experimental traumatic brain injury. *J Cereb Blood Flow Metab.* 2014 Mar;34(3):502-13.

Bettayeb K, et al. CR8, a potent and selective, roscovitine-derived inhibitor of cyclin-dependent kinases. *Oncogene.* 2008 Oct 2;27(44):5797-807.

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