# Data Sheet (Cat.No.T8796)



## CAN508

Chemical Proper	ties	
CAS No. :	140651-18-9	₀н
Formula:	C9H10N6O	
Molecular Weight:	218.22	Ŷ_N N⊳
Appearance:	no data available	
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year	

### **Biological Description**

Description	CAN508 is a potent, ATP-competitive CDK9/cyclin T1 inhibitor with an IC50 of 0.35 $\mu$ M. It is also a competitive inhibitor of Cdk2-cyclin E with respect to ATP, with Ki and IC50 values of 13.3 and 20 $\mu$ M, respectively.CAN508 exhibits a 38-fold selectivity for CDK9/cyclin T over other CDK/cyclin complexes. Antitumor activity.
Targets(IC50)	CDK
In vitro	The most potent inhibitor,CAN508, reduced the frequency of S-phase cells of the cancer cell line HT-29 in antiproliferation assays.?Further observed cellular effects included decreased phosphorylation of the retinoblastoma protein and the C-terminal domain of RNA polymerase II, inhibition of mRNA synthesis, and induction of the tumor suppressor protein p53, all of which are consistent with inhibition of CDK9.

#### **Solubility Information**

Solubility	DMSO: 250 mg/mL (1145.63 mM),Sonication is recommended.	
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	Ó.

#### Preparing Stock Solutions

	1mg	5mg	10mg	
1 mM	4.5825 mL	22.9127 mL	45.8253 mL	
5 mM	0.9165 mL	4.5825 mL	9.1651 mL	
10 mM	0.4583 mL	2.2913 mL	4.5825 mL	
50 mM	0.0917 mL	0.4583 mL	0.9165 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.

#### Reference

Krystof V, et al. 4-arylazo-3,5-diamino-1H-pyrazole CDK inhibitors: SAR study, crystal structure in complex with CDK2, selectivity, and cellular effects. J Med Chem. 2006;49(22):6500-6509.

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