

A011

## Chemical Properties

CAS No. :

Formula: C<sub>27</sub>H<sub>28</sub>N<sub>6</sub>O

Molecular Weight: 452.55

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	A011, a potent and selective ataxia-telangiectasia mutated (ATM) inhibitor, exhibits an IC <sub>50</sub> of 1.0 nM and triggers apoptosis as well as G <sub>2</sub> /M phase cell cycle arrest when combined with CPT-11, displaying notable antitumor activity [1].
Targets(IC <sub>50</sub> )	Apoptosis,ATM/ATR
In vitro	Compound A011 (compound 8d) at concentrations of 10, 30, and 100 nM applied for 5 days increases the sensitivity of SW620 and HCT116 cells to CPT-11 (100 nM) [1]. When administered in conjunction with CPT-11 at doses ranging from 0 to 100 nM for 24 and 72 hours, A011 induces apoptosis and cell cycle arrest at the G <sub>2</sub> /M phase [1]. Furthermore, A011 at concentrations of 3, 9, 27, 83, and 250 nM reduces the expression of p-ATM and p-Chk2 in a dose-dependent manner in SW620 cells under irradiation conditions of 1.5 or 3 Gy [1].
In vivo	A011 (5 mg/kg; intraperitoneal injection; daily for 23 days) combined with CPT-11 (5 mg/kg, intraperitoneal injection; once weekly) demonstrated antitumor activity in mice [1].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2097 mL	11.0485 mL	22.097 mL
5 mM	0.4419 mL	2.2097 mL	4.4194 mL
10 mM	0.221 mL	1.1049 mL	2.2097 mL
50 mM	0.0442 mL	0.221 mL	0.4419 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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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