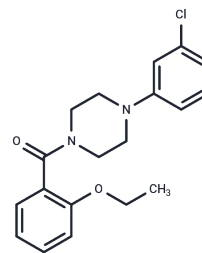


AK301

## Chemical Properties

CAS No. : 314022-97-4  
 Formula: C<sub>19</sub>H<sub>21</sub>ClN<sub>2</sub>O<sub>2</sub>  
 Molecular Weight: 344.84  
 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	AK301 is a potent and selective inhibitor of tubulin polymerization and an effective sensitizer of cancer cells to apoptotic ligands (EC <sub>50</sub> < 200 nM). Colon cancer cells arrested in mitosis with AK301 readily underwent a p53-dependent apoptosis following compound withdrawal and arrest release.
Targets(IC50)	Apoptosis, Microtubule Associated

## Solubility Information

Solubility	DMSO: 3.85 mg/mL (11.16 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	2.8999 mL	14.4995 mL	28.999 mL
5 mM	0.580 mL	2.8999 mL	5.7998 mL
10 mM	0.290 mL	1.4499 mL	2.8999 mL
50 mM	0.058 mL	0.290 mL	0.580 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

- Chopra A, et al. Efficient Activation of Apoptotic Signaling during Mitotic Arrest with AK301. *PLoS One*. 2016 Apr 20;11(4):e0153818.
- Chopra A, et al. Novel piperazine-based compounds inhibit microtubule dynamics and sensitize colon cancer cells to tumor necrosis factor-induced apoptosis. *J Biol Chem*. 2014 Jan 31;289(5):2978-91.

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

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