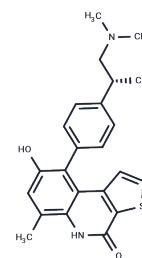


OTS964

## Chemical Properties

CAS No. : 1338542-14-5  
 Formula: C<sub>23</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>S  
 Molecular Weight: 392.51  
 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	OTS964 is a potent, orally active compound that operates as a highly selective inhibitor of TOPK with an IC <sub>50</sub> of 28 nM [1]. Additionally, it demonstrates significant inhibitory action against cyclin-dependent kinase CDK11, specifically binding to CDK11B with a K <sub>d</sub> of 40 nM [2].
Targets(IC <sub>50</sub> )	Apoptosis,Others,CDK,TOPK
In vitro	OTS964 treatment at a concentration of 10 nM for 48 hours has been shown to effectively suppress the proliferation of cancer cells and increase cancer cell death in LU-99 cells, as reported in study [1]. Moreover, when OTS964 is administered to Hs683 and H4 cells at varying concentrations (0.1, 1, and 2 μM) for 24 and 48 hours, it significantly upregulates the expression of LC3-II and downregulates P62 expression in a dose-dependent manner, as demonstrated in study [3]. This indicates OTS964's strong potential in inducing autophagy and promoting apoptotic processes in cancer cells.
In vivo	OTS964, administered intravenously at a dosage of 40 mg/kg on days 1, 4, 8, 11, 15, and 18, leads to continuous tumor shrinkage post-treatment, culminating in complete regression in nude mice bearing LU-99 lung cancer cells [1]. Similarly, oral administration of OTS964 at daily doses of 50 or 100 mg/kg for two weeks results in complete tumor regression in the same animal model [1]. These findings highlight the efficacy of OTS964 in inducing complete regression of LU-99 lung cancer cells in nude mice, regardless of the route of administration.

### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.5477 mL	12.7385 mL	25.4771 mL
5 mM	0.5095 mL	2.5477 mL	5.0954 mL
10 mM	0.2548 mL	1.2739 mL	2.5477 mL
50 mM	0.051 mL	0.2548 mL	0.5095 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.

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

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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