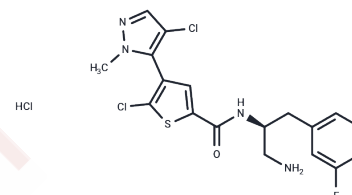


## Afuresertib hydrochloride

## Chemical Properties

CAS No. :	1047645-82-8
Formula:	C <sub>18</sub> H <sub>18</sub> Cl <sub>3</sub> FN <sub>4</sub> O <sub>5</sub>
Molecular Weight:	463.8
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	Afuresertib hydrochloride is an inhibitor of Akt kinase (Kis of 0.08/2/2.6 nM for Akt1/Akt2/Akt3 respectively)
Targets(IC50)	Akt,PKC,ROCK
In vitro	Afuresertib-induced p21 expression promotes G1 phase arrest by inducing FOXO activity. Furthermore, afuresertib significantly enhanced cisplatin-induced cytotoxicity. Afuresertib modulated the expression E2F1 and MYC, which are associated with fibroblast core serum response. Suggest that afuresertib is a useful anticancer drug for treating patients with MPM[1].
Cell Research	Cell confluence proliferation assay was performed using Incucyte ZOOM Live-Cell Imaging System. Briefly, ACC-MESO-4 and MSTO-211H cells were seeded in 12-well plates (cell density, 1 × 10 <sup>4</sup> cells/well) and were incubated for 24 h at 37°C. Then, the cells were incubated with 0, 2, 5, or 10 μmol/L afuresertib. During treatment, cell growth was monitored by recording phase images using the IncuCyte ZOOM Live-Cell Imaging System (magnification, ×100)[1].

## Solubility Information

Solubility	DMSO: 100 mg/mL (215.61 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (8.62 mM),Sonication is recommended. <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	2.1561 mL	10.7805 mL	21.561 mL
5 mM	0.4312 mL	2.1561 mL	4.3122 mL
10 mM	0.2156 mL	1.0781 mL	2.1561 mL
50 mM	0.0431 mL	0.2156 mL	0.4312 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

Yamaji M , Ota A , Wahiduzzaman M , et al. Novel ATP-competitive Akt inhibitor afuresertib suppresses the proliferation of malignant pleural mesothelioma cells[J]. Cancer Medicine, 2017.

Blagden SP, Hamilton AL, Mileskin L, et al. Phase IB Dose Escalation and Expansion Study of AKT Inhibitor Afuresertib with Carboplatin and Paclitaxel in Recurrent Platinum-resistant Ovarian Cancer. Clin Cancer Res. 2019 Mar 1;25(5):1472-1478.

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