

AKN-028

## Chemical Properties

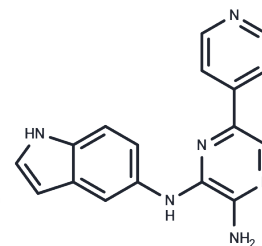
CAS No. : 1175017-90-9

Formula: C<sub>17</sub>H<sub>14</sub>N<sub>6</sub>

Molecular Weight: 302.33

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	AKN-028 is an orally active and potent FLT3 tyrosine kinase inhibitor (IC <sub>50</sub> = 6 nM). AKN-028 causes dose-dependent inhibition of FLT3 autophosphorylation.
Targets(IC <sub>50</sub> )	Apoptosis,FLT,Caspase
In vitro	AKN-028 triggers apoptosis in MV4-11 by activation of caspase 3 [1]. AKN-028 (10 μM) is cytotoxic to AML cell lines and induces apoptosis in the AML cell line MV4-11 [1]. Cell Cytotoxicity Assay [1] Cell Line: AML cell line MV4-11. Concentration: 10 μM. Incubation Time: 24 h. Result: Was cytotoxic to primary AML cells, irrespective of FLT3 mutation status and quantitative FLT3 expression.
In vivo	AKN-028 (15 mg/kg, Subcutaneously injection twice daily) exhibits anti-tumor activities for acute myeloid leukemia (AML) models [1]. Animal Model: Mice based AML and MV4-11 cells [1]. Dosage: 15 mg/kg. Administration: Subcutaneously injection twice daily. Result: Inhibited net growth of one of the primary AML samples (UPN26) in vivo and furthermore reduced the tumor mass of MV4-11 cell line.

## Solubility Information

Solubility	DMSO: 20 mg/mL (66.15 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	3.3076 mL	16.5382 mL	33.0764 mL
5 mM	0.6615 mL	3.3076 mL	6.6153 mL
10 mM	0.3308 mL	1.6538 mL	3.3076 mL
50 mM	0.0662 mL	0.3308 mL	0.6615 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

A Eriksson, et al. The Novel Tyrosine Kinase Inhibitor AKN-028 Has Significant Antileukemic Activity in Cell Lines and Primary Cultures of Acute Myeloid Leukemia. Blood Cancer J. 2012 Aug 3;2(8):e81.

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