

## Tankyrase Inhibitors (TNKS) 49

## Chemical Properties

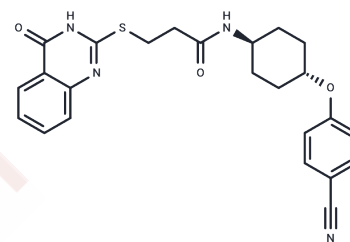
CAS No. :

Formula: C<sub>24</sub>H<sub>24</sub>N<sub>4</sub>O<sub>3</sub>S

Molecular Weight: 448.54

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	Tankyrase Inhibitors 49 is an effective, selective, and orally bioavailable inhibitor of tankyrase (IC <sub>50</sub> : 0.1 nM).
Targets(IC <sub>50</sub> )	Others
In vitro	Tankyrase inhibitors 49 is an optimization of the previous hit compound inhibitor 8 with improved potency and selectivity. It has excellent effects in both tankyrase assay and cellular assay (IC <sub>50</sub> : 0.1 nM and 1.9 nM, respectively). In addition, it is found to be a dual binder with both the nicotinamide pocket and the induced pocket of the enzymes [1].
In vivo	In the in vivo studies in rodents, tankyrase inhibitors 49 is found to potently inhibit TNKS2 autoparsylation (IC <sub>50</sub> : 7.6 nM). It also causes stabilization and accumulation of axin protein in SW480 cells (EC <sub>50</sub> : 4 nM). In DLD-1 cells with truncated APC, the inhibitor inhibits the STF reporter transcription (IC <sub>50</sub> : 0.3 nM) suggesting its downstream inhibitory activity on Wnt-associated transcription [1].

## Solubility Information

Solubility	DMSO: ≥22.45 mg/mL, 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	2.2295 mL	11.1473 mL	22.2946 mL
5 mM	0.4459 mL	2.2295 mL	4.4589 mL
10 mM	0.2229 mL	1.1147 mL	2.2295 mL
50 mM	0.0446 mL	0.2229 mL	0.4459 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

Kelly L M, Yu J C, Boulton C L, et al. CT53518, a novel selective FLT3 antagonist for the treatment of acute myelogenous leukemia (AML)[J]. *Cancer cell*, 2002, 1(5): 421-432.

Ponnurangam S, Standing D, Rangarajan P, et al. Tandutinib inhibits the Akt/mTOR signaling pathway to inhibit colon cancer growth[J]. *Molecular cancer therapeutics*, 2013, 12(5): 598-609.

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