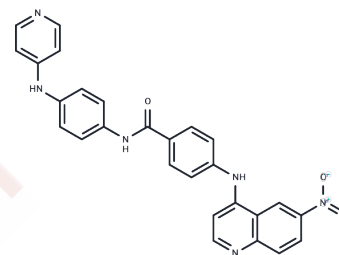


## T3Inh-1

## Chemical Properties

CAS No. :	50440-30-7
Formula:	C <sub>27</sub> H <sub>20</sub> N <sub>6</sub> O <sub>3</sub>
Molecular Weight:	476.49
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	T3Inh-1 is a potent and selective ppGalNAc-T3 inhibitor with IC <sub>50</sub> of 7 μM. T3Inh-1 protects against breast cancer cells. T3Inh-1 reduces FGF23 hormone levels in tissue cells and mice without causing any toxic side effects.
Targets(IC <sub>50</sub> )	Others
In vitro	<b>METHODS:</b> Breast cancer MDA-MB231 cells were treated with T3Inh-1 (5μM, 24/48 hours) to observe cell proliferation and cell invasion. <b>RESULTS</b> T3Inh-1 was significantly effective, inhibiting migration by >80% and invasion by 98%, but had no significant effect on cell proliferation. [1]
In vivo	<b>METHODS:</b> Mice were injected intraperitoneally with T3Inh-1 and serum cleaved FGF23 levels were measured. Three groups of T3Inh-1 (25 and 50 mg/kg, intraperitoneal injection, 24 hours) were administered and serum cleaved FGF23 levels were measured. <b>RESULTS</b> T3Inh-1 resulted in a robust and statistically significant increase in this ratio at the tested concentrations of 25 and 50 mg/kg, suggesting that T3Inh-1 can mitigate the effects of elevated FGF23 signaling in patients with chronic kidney disease. [1]

## Solubility Information

Solubility	DMSO: 4.77 mg/mL (10.01 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: 1 mg/mL (2.1 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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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.0987 mL	10.4934 mL	20.9868 mL
5 mM	0.4197 mL	2.0987 mL	4.1974 mL
10 mM	0.2099 mL	1.0493 mL	2.0987 mL
50 mM	0.042 mL	0.2099 mL	0.4197 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

Song L, et al. Inhibitor of ppGalNAc-T3-mediated O-glycosylation blocks cancer cell invasiveness and lowers FGF23 levels. *Elife*. 2017;6:e2405. Published 2017 Mar 31.

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