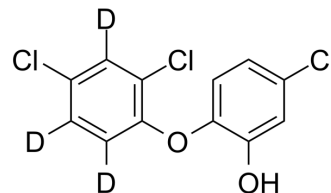


## Triclosan-d<sub>3</sub>

<b>Cat. No.:</b>	HY-B1119S		
<b>CAS No.:</b>	1020719-98-5		
<b>Molecular Formula:</b>	C <sub>12</sub> H <sub>4</sub> D <sub>3</sub> Cl <sub>3</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	292.56		
<b>Target:</b>	Bacterial; Fungal; Autophagy; Antibiotic		
<b>Pathway:</b>	Anti-infection; Autophagy		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (341.81 mM; Need ultrasonic and warming)  
 DMSO : ≥ 100 mg/mL (341.81 mM)  
 H<sub>2</sub>O : 1 mg/mL (3.42 mM; ultrasonic and warming and heat to 80°C)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.4181 mL	17.0905 mL	34.1810 mL
	5 mM	0.6836 mL	3.4181 mL	6.8362 mL
	10 mM	0.3418 mL	1.7091 mL	3.4181 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Triclosan-d<sub>3</sub> is the deuterium labeled Triclosan. Triclosan is an antibacterial and antifungal agent found in consumer products, including soaps, detergents, toys, and surgical cleaning treatments<sup>[1][2]</sup>.

#### In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

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[2]. Weatherly LM, et al. Triclosan exposure, transformation, and human health effects. J Toxicol Environ Health B Crit Rev. 2017;20(8):447-469.

[3]. Ley C, et al. Triclosan and triclocarban exposure and thyroid function during pregnancy-A randomized intervention. Reprod Toxicol. 2017 Dec;74:143-149.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA