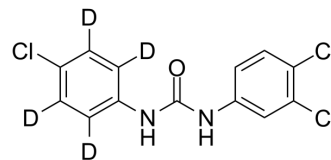


Triclocarban-d₄

Cat. No.:	HY-B1805S		
CAS No.:	1219799-29-7		
Molecular Formula:	C ₁₃ H ₅ D ₄ Cl ₃ N ₂ O		
Molecular Weight:	319.61		
Target:	Bacterial		
Pathway:	Anti-infection		
Storage:	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 (312.88 mM; Need ultrasonic)
 DMSO : 100 mg/mL (312.88 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.1288 mL	15.6441 mL	31.2881 mL
5 mM	0.6258 mL	3.1288 mL	6.2576 mL
10 mM	0.3129 mL	1.5644 mL	3.1288 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (7.82 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Triclocarban-d₄ is the deuterium labeled Triclocarban. Triclocarban (3,4,4'-Trichlorocarbanilide), a broad spectrum antibacterial compound, is widely used in a broad range of applications such as the production of soaps, skin creams, toothpastes and deodorants. Triclocarban is a potential endocrine-disrupting chemical with the capacity to modulate androgen and estrogen activities as well as other hormone-mediated biological processes[1][2][3].

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^[1].
 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.
 - [2]. Kanbara Y, et al. Nanomolar concentration of triclocarban increases the vulnerability of rat thymocytes to oxidative stress. *J Toxicol Sci.* 2013 Feb;38(1):49-55.
 - [3]. Huang H, et al. The in vitro estrogenic activities of triclosan and triclocarban. *J Appl Toxicol.* 2014 Sep;34(9):1060-7.
 - [4]. Kennedy RC, et al. Early life triclocarban exposure during lactation affects neonate rat survival. *Reprod Sci.* 2015 Jan;22(1):75-89.
-

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

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