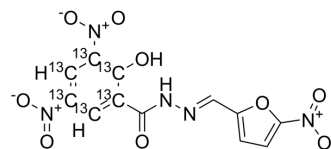


Nifursol-¹³C₆

Cat. No.:	HY-B1703S
Molecular Formula:	C ₆ ¹³ C ₆ H ₇ N ₅ O ₉
Molecular Weight:	371.17
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (134.71 mM; Need ultrasonic)

Concentration	Solvent	Mass	1 mg	5 mg	10 mg
			1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		2.6942 mL	13.4709 mL	26.9418 mL
	5 mM		0.5388 mL	2.6942 mL	5.3884 mL
	10 mM		0.2694 mL	1.3471 mL	2.6942 mL

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

BIOLOGICAL ACTIVITY

Description

Nifursol-¹³C₆ is the ¹³C₆ labeled Nifursol. Nifursol is a potent and orally active veterinary antibiotic for the prevention of histomoniasis. Nifursol rapidly metabolizes to form the metabolic marker 3,5-dinitrosalicylic acid hydrazide (DNSAH) which can persist for a long time. Nifursol is widely used for the research of Escherichia Gastroenteropathy in poultry, fowl and aquatic animal.

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]. Bowen TE, et al. Effect of cupric sulfate on the prophylactic efficacy of 2-acetyl-amino-5-nitrothiazole, nifursol and ipronidazole against histomoniasis in turkeys. *Poult Sci.* 1971 Nov;50(6):1668-72.
- [2]. Jorge Barbosa, et al. Detection, accumulation, distribution, and depletion of furaltadone and nifursol residues in poultry muscle, liver, and gizzard. *J Agric Food Chem.*

2011 Nov 23;59(22):11927-34.

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

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